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Threat Presentations for Selected Battlefield Scenarios

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March 1990

Fort Knox Field Unit
Training Research Laboratory

U.S. Army Research Institute for the Behavioral and Social Sciences

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Research accomplished under contract
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Threat Presentations for Selected Battlefield Scenarios

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**Human Performance Effectiveness
and Simulation**

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FOREWORD

Over the last several years, training developers have recognized the need to incorporate information concerning threat into the conditions and standards for gunnery training. The present research is intended to help satisfy that need by providing specific products that can be directly incorporated as the threat segment of a specific gunnery training strategy.

This research was conducted to provide an initial test of a methodology developed by Campbell and Campbell (1990). The products from this research were also intended to demonstrate development of realistic threat-based target arrays for live-fire and simulation ranges used by tank and Bradley crews and platoons.

This research is part of the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) task entitled "Application of Technology to Meet Armor Skills Training Needs." It is performed under the auspices of ARI's Armor Research and Development Activity at Fort Knox. The proponent for this research is the Deputy Chief of Staff for Training (DCST) at the U.S. Army Training and Doctrine Command (TRADOC).

Consultation during development of these products was provided by Mr. Dave Phipps of the Threat Division, Directorate of Combat Developments at the U.S. Army Armor School at Fort Knox, Kentucky. However, the threats portrayed in these products have not been approved or endorsed by either the Threat Division or the U.S. Army Armor School. Any errors are the sole responsibility of the author.

Two threat-based targetry arrays contained in this report were integrated by the Office of the Program Manager for Training Device Development (PM TRADE) into a demonstration of current precision range integrated maneuver exercise (PRIME) capabilities using Phantom Run Range at Fort Hood, Texas, on October 27, 1989. The demonstration was presented for the DCST, TRADOC.



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Technical information and suggestions provided by Major Michael A. Sedlack, III Corps G-3 Training Division, Phantom Run, Fort Hood, Texas, contributed significantly to this report. Lieutenant Colonel (LTC) Richard Peters, Program Manager, PRIME, PM TRADE, Orlando, Florida, also contributed significantly by integrating the threat-based target arrays into a Phantom Run Demonstration. Command Sergeant Major, Retired (CSM(Ret)), Will Dean and his crew from III Corps G-3, Range Division, deserve special thanks for their help and perseverance on the range.

THREAT PRESENTATIONS FOR SELECTED BATTLEFIELD SCENARIOS

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THREAT PRESENTATIONS FOR SELECTED BATTLEFIELD SCENARIOS

Background

The ultimate direction of any battalion and company gunnery program must be focused towards winning on the future battlefield. To accomplish this task requires the melding of many individual, crew and unit skills. All of these, however, depend on two things, the ability to kill tanks and armored vehicles and the ability to survive. The ability to kill tanks/armored combat vehicles (ACVs) is based upon the science of gunnery and knowing that few ACVs are catastrophically destroyed by single, frontal rounds. The ability to survive is based on the tactical art of maneuver and position, so as best to be able to kill tanks and live to the next day. On the other hand, in day to day training, gunnery skills are emphasized on a sterile course run on range routes, firing engagements from predetermined positions against a known scenario. The value of the training is not based on how well the platoon (crew/tank) survives its tactical environment but is based on how many vehicles (tanks) distinguish, qualify, or bolo determined from hit/miss scores on these sterile qualification ranges.

Current, existing armored gunnery strategy is supported only in the rudimentary basics because of the limited restrictions of live fire ranges. There is a fixation on Table VIII qualification as the "end-all" determination of training proficiency, yet engagements are limited. They only partially address the training required through using known scenarios that basically measure ballistic accuracy and crew drill engagement times.

Tables VIII and XII, alone, are not measures of combat readiness and cannot promise tactical success at the National Training Center (NTC) or on the future battlefield. The future battlefield requires a new approach to the use of modernized army ranges. The implications of antiarmor operations on the integrated battlefield cannot be accomplished on most ranges using live fire. Limitations of live fire safety fans due to risk of surface damage prevent engagements to flank and rear or close combat and at reduced ranges. Live fire constraints present limitations on battlefield performance and should not be used as the criteria to evaluate collective performance, combat proficiency, command and control or maneuver. You will fail in combat or at the NTC if you cannot (1) fight effectively as a platoon, (2) acquire targets in offensive maneuver, (3) defeat advancing opposing forces (OPFOR) in the defense, (4) out-maneuver (out-think) the OPFOR during engagements. The foundation of collective training toward mission accomplishment is tactical proficiency at the Platoon/Squad level of combat.

Threat presentation targetry arrays combined with selected training devices and simulations, provides one capability to practice the platoon threshold battle run skills, a means to objectively measure proficiency, and a basis for conducting comprehensive "real-world" evaluations. Threat targetry arrays reflect realistic targetry requirements that represent sufficient detail for acquisition, classification and identification, and in quantities that more accurately reflect the threat. When combined with simulation and training devices, the presentations are adaptable to the above mentioned conditions and could include additional enhancements such as realistic thermalization of targets, battlefield obscuration, nuclear, biological, chemical (NBC) conditions, plus others.

Defining The Threat

Current Airland Battle doctrinal concepts caution us that today's potential battlefield will be extremely lethal, chaotic, and unpredictable. However, there exists a base set of tactical principles set forth within the Soviet military philosophy of war which may be addressed by United States (U.S.) Armor Forces through training and drills. Also, there currently exists several training support systems that provide for the training focus of the armor platoon and it's ability to successfully maneuver, acquire and engage targets, and survive on a realistic, real-time, simulation range.

This report provides a "proof of principle" to the threat analysis methodology provided by Campbell and Campbell (1990). That study created a set of procedures whereby the threat domain is organized by selected threat parameters that are also relevant to overall gunnery training objectives. Further proceduralized steps address the way to sample from that domain in such a way that no important threat types are omitted. The methodology provides for a dynamic portrayal of the threat with selection of significant tactical encounter points during an engagement and the incorporation of different attrition factors. It requires the selection of pertinent battlefield systems (such as smoke, NBC, artillery) but does not force those systems on any given encounter; rather providing them to be employed at the trainer's discretion. Finally, the methodology provides a uniform method of describing and depicting the threat. While a complete understanding of the defining and sampling methodology will require study of the Campbell and Campbell (1990) work, Table 1 provides an overview of the steps required in its applications.

Using that methodology, threat vehicle arrays were developed to represent a variety of threat formations. Second, the arrays that are generated may then be used by trainers to construct realistic threat-based targetry for use in practice engagements. Included are formations, force sizes, weapons and effective ranges, movement speeds, and attrition rates that can be selected for tactical simulations that provide for quality repetitions while practicing the platoon mission essential training list (METL) tasks.

The basic functional element of the threat domain proposed herein is the lowest doctrinal entity capable of conducting all the aspects of battlefield warfare that impact on tank gunnery at the crew and platoon levels. A regiment appears best suited as a start point because it is a basic combined arms building block for combat. It has organic capabilities for combat and logistic support and is the lowest level organization having a staff capable of planning and coordinating combat actions.

If size and echelon are considered, it becomes apparent that a threat regiment has much greater battlefield capability and tactical influence than does a U.S. Platoon. The regiment functions three echelons above a platoon. If we apply the tactical rule of thumb to identify the composition of enemy forces at least one echelon above your own echelon, then something less than a regiment is applicable. A *regimental slice* portrayed doctrinally would represent a battalion sized unit with regimental or higher echelon assets located within the battalion's area of operations. The battalion is further reduced to a smaller force, for example, a Motorized Rifle Company, dependent upon scenario, threat mission, and the U.S. Platoon METL identified for

Table 1

Activities and Steps in the Sampling Methodology for Definition of the Threat Domain

Activity 1: Designate Red Organization and Composition

Step 1: Select Tactical Unit

Step 2: Select Battlefield Systems

Activity 2: Define Red Missions

Activity 3: Deploy Threat Unit

Step 1: Select Red Unit Formation

Step 2: Describe Unit Equipment/Personnel

Step 3: Describe Battlefield Systems (Scenario Enhancements)

Step 4: Select Distances and Frontages

Step 5: Determine Threat Slice

Activity 4: Determine Range Lines and Encounter Rates

Step 1: Specify Range Lines

Step 2: Specify Encounter Times

Activity 5: Prepare Initial Scenario Brief

Activity 6: Designate Loss Rates

Activity 7: Prepare Subsequent Scenario Briefs

Step 1: Determine number of remaining threat systems at each Range Line for each Loss Rate

Step 2: Determine configuration of Red force at each Range Line

training. Thus the THREAT tank or motorized rifle company (reinforced) represents a manageable, realistic, portrayal of battlefield arrays and mixes of functional, tactical systems. It can be portrayed graphically in relation to the tank crew and tank platoon's area of influence in both front and depth.

A mission matrix shown in Table 2 simplifies the comparisons of how to determine U.S. Forces deployed against specific threat missions. Only the basic, root missions were used when constructing the matrix. Additional missions were considered as variants of the basic Attack and Defend missions for U.S. Forces. Four doctrinal missions were used for threat forces as described in Field Manual (FM) 100-2-1 (Department of the Army, 1984a).

Table 2

Mission Comparison Matrix

		Red Missions			
		Meeting Engagement	Deliberate Attack	Prepared/Hasty Defense	Withdrawal
<u>Blue Missions</u>	<u>Meeting Engagement</u>				
	Deliberate Attack	Red Meeting Engagement Blue Attack	x	Red Defense Blue Attack	Red Withdrawal
Defend Battle Position	Red Meeting Engagement Blue Defense	Red Attack Blue Defend		x	x

One mission, the Threat Breakthrough versus a U.S. Defense was added to the domain to demonstrate the need for training on engagements to the flanks and rear. It is representative of a nonlinear battlefield as defined by U.S. Airland Battle Doctrine and reflects the tactical teachings of the Warsaw Pact countries.

Finally, mission, force ratios, and frontages and depths, may be further supported by the Threat slice of battlefield operating systems. These are defined as:

- Air Defense
- Communications
- Reconnaissance
- Rear Services
- Command/Control
- Engineers
- Air Support
- Smoke
- NBC
- Electronic Warfare
- Fire Support
- Anti-Tank

Threat Scenario Domain

Appendix A of this report is forty-two threat target arrays. Presented are arrays that were developed when using the methodology from Campbell and Campbell (1990). The six Initial scenarios at Appendix A were prepared to demonstrate the scenarios representative of threat-based targetry. Each contains a descriptive text and accompanying graphic drawing that explains the engagement and existing conditions. They resulted in six representative

engagements between a Soviet Motorized Rifle Regiment (BMP)^{*} and a U.S. Tank Battalion, and are narrowed down to a "slice" of the threat that is within the tactical scope a U.S. tank platoon. They demonstrate the criteria that enter into the preparation of engagements built around a scenario framework.

Each initial scenario is supported by six subsequent engagements that demonstrate how the engagement may look at different ranges, and after some depletion of forces has occurred. Each is a stand-alone document in the sense that the user who has read the explanation of the threat target array development in the body of this report may use the examples in Appendix A to guide development of additional threat target array definitions.

The six initial scenarios were developed using the mission matrix in Table 2 and threat doctrine provided by FM 100-2 (Department of the Army, 1984b) and FM 100-2-3 (Department of the Army, 1988a). Each was initially developed to represent a snapshot of the battlefield just prior to the actual engagement. Subsequent engagements are shown using different ranges and two attrition rates, to demonstrate what the engagement may look like sometime after the first round is fired. The subsequent engagements represent different difficulty levels and engagement times based upon range and movement rates. Seven battlefield conditions are included at the end of Appendix A. They demonstrate additional battlefield conditions and operating systems that certainly will be encountered during any dynamic battle. These can be combined with any of the engagement scenarios either singularly or combined to further enhance and support training objectives.

A summary of the six scenarios is presented below:

- Scenario 1.0 Red Attack vs. U.S. Defense
- Scenario 2.0 Red Meeting Engagement vs. U.S. Defense
- Scenario 3.0 Red Meeting Engagement vs. U.S. Attack
- Scenario 4.0 Red Deliberate Defense vs. U.S. Attack
- Scenario 5.0 Red Withdrawal vs. U.S. Attack
- Scenario 6.0 Red Breakthrough vs. U.S. Defense

Subsequent engagements for each scenario are numbered by range and attrition rate as follows:

- .1 high attrition range 2000 m
- .2 high attrition range 1000 m
- .3 high attrition range 500 m
- .4 low attrition range 2000 m
- .5 low attrition range 1000 m
- .6 low attrition range 500 m

*This is a Russian language abbreviation indicating an *infantry combat vehicle*.

The seven battlefield enhancements which consist of both battlefield conditions and operating systems are listed below:

- A. Tactical Air/Combat Air Support
- B. Attack Helicopter
- C. Electronic Warfare
- D. Chemical
- E. Counter-Mobility
- F. Indirect Fire
- G. Smoke

Using The Threat Scenarios

The threat targetry arrays represent both a sequence and a specific point during an engagement event. This series of successively depleting engagements from any of the basic missions combinations represents a dynamic sequence. Any one single engagement simply represents an isolated point in time. For platoon level training, the threat targetry arrays may be represented different ways, dependent upon the level of difficulty desired by the trainer and the scope of the training. One way to use the Threat targetry is to treat a specific targetry array as a separate and independent, single engagement. For example, if the trainer's objective is to replicate a Table VIII and train those separate tasks distinct to Table VIII, then individual selection of targetry is made based upon only those requirements. The same approach is applied for any other single engagement, under varying conditions and difficulty levels.

A second approach is to present a series of threat arrays as an integrated scenario. The trainer should refer back to the platoon drills or collective tasks to be trained select engagements and formulate scenarios. Once the engagement is developed and prepared, subsequent engagements are needed to indicate how the trainer wants the situation to develop throughout the scenario, and to determine changes in the threat configuration over time as a result of attrition or intervisibility. Campbell and Hoffman (1990) present a computer based method for selecting engagements to meet METL training requirements. Individual engagements are presented within a framework of scenario graphics, orders drills, and decision requirements of the platoon command and control. The dynamic nature of the threat is portrayed as a series of snap shots. For example, the soviets view the "meeting engagement" as an encounter by two opposing sides while each is simultaneously advancing to carry out its assigned mission. It is viewed by the Soviets as the most likely form of encounter and is characterized by obscurity of the situation and rapidly changing elements which require immediate, accurate decisions under fast-paced, stressful conditions.

The second approach more closely emulates the domain of platoon tasks required by NTC participation. By combining engagements from different missions, a scenario can be built to exercise the tactical transition back and forth from offense to defense that is often required during combat operations.

The threat analysis methodology provided by Campbell and Campbell (1990) was used to describe and organize the threat in terms of the vehicles, formations, and deployment density representative of combat engagements. The threat-based target arrays provide dimensions of threat capabilities and provides a framework that considers levels of those conditions. It presents

the trainer with relevant categories of threat conditions that allows the trainer to prepare realistic training scenarios that are supportive of the "train as you will fight" doctrine from FM 25-100 (Department of the Army, 1988b).

Summary

Six sets of engagements were prepared. Each set describes a different combination of Red mission against Blue mission. These include:

- Red Meeting Engagement versus Blue Attack
- Red Meeting Engagement versus Blue Defense
- Red Attack versus Blue Defense
- Red Deliberate Defense versus Blue Attack
- Red Withdrawal versus Blue Attack
- Red Breakthrough versus Blue Defense

For each of these sets, seven separate Red deployments or engagement diagrams were depicted. For all but the Red Breakthrough condition, an initial engagement diagram show the full threat (Motorized Rifle Company (MRC) reinforced) at a range just beyond the effective range of the M1A1 tank. For the breakthrough, an initial diagram shows the threat at the time of the breakthrough. Additional engagement diagrams were prepared to depict changes in Red formations at three ranges subsequent to the initial condition. In these subsequent engagement diagrams, Red vehicles were reduced from original levels to represent the attrition of Red vehicles. To allow for two levels of difficulty of engagements, two subsets of subsequent engagement were prepared for each of the six mission combinations. One set shows a high Red loss rate with relatively few Red vehicles and the other shows a low Red loss rate with relatively more Red vehicles. Thus, for each of six mission combinations, seven engagements were developed: an initial diagram and six subsequent diagrams that show Red formations that result when two attrition rates are applied to three subsequent ranges.

Realistic threat-based targetry is only a first step of what is needed to set conditions for quality training. Further analyses are needed to identify standards required to defeat the threat using threat-based target arrays and the quantities of combat vehicles implied by such conditions. Performance standards refer to accuracy/number of rounds fired applied against survivability factors and engagement times. Those standards can be used in testing platoon and crew gunnery in order to assess training posture more realistically.

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Appendix A

Initial and Subsequent Scenario Briefs

The six Initial Scenario Briefs and thirty-six Subsequent Scenario Briefs presented have been based on encounters between elements of a Blue Tank Task Force and elements of a Soviet Motorized Rifle Regiment (BMP) in a European Theater.

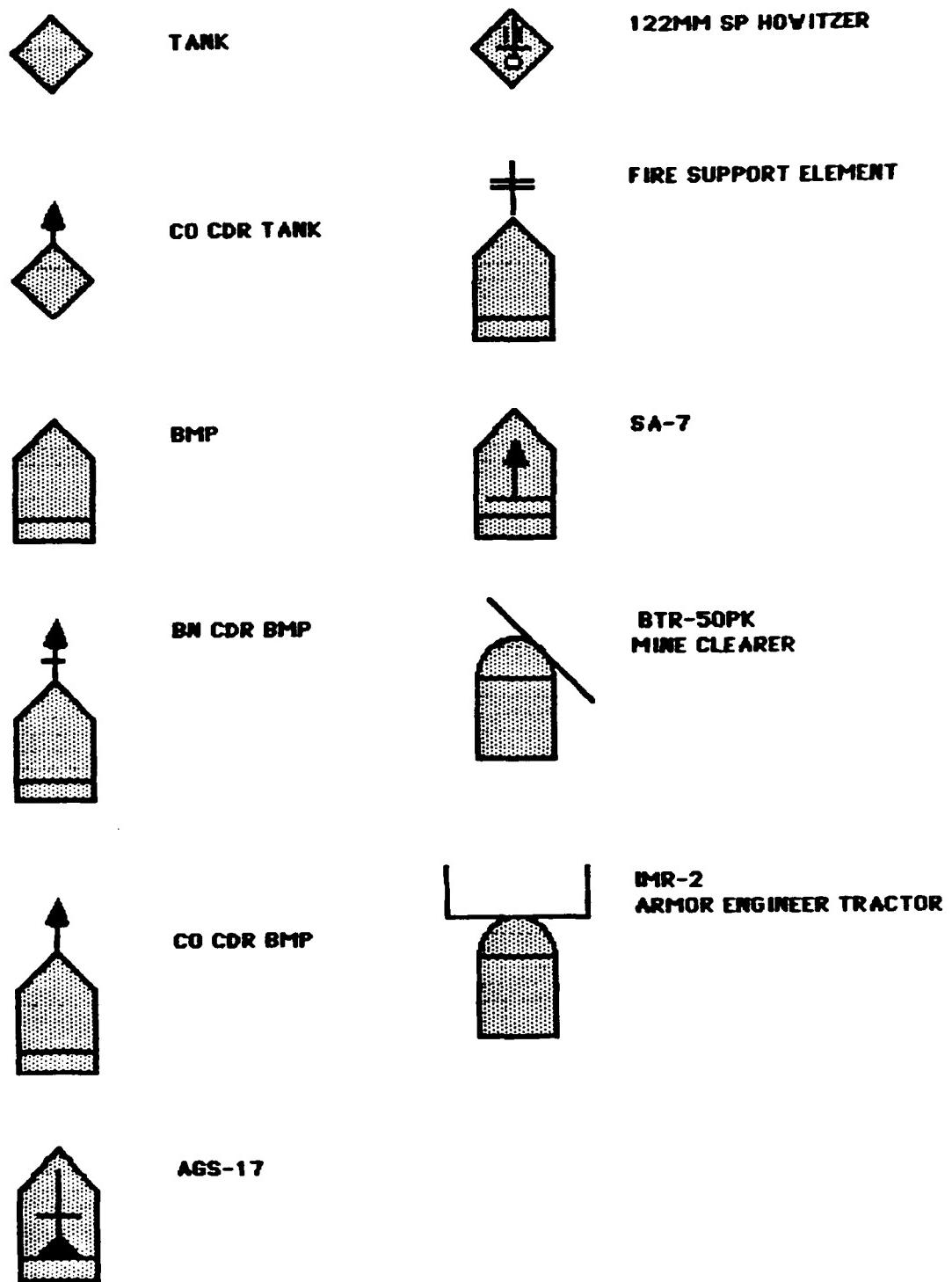


Figure A-1. Red vehicle symbols and terms used in threat arrays.

(Figure continues)

AA	- anti aircraft
AGS-	- Soviet automatic grenade launcher system
AT-	- Soviet anti tank system
BMP-	- Soviet infantry combat vehicle system
BN	- battalion
BREWER	- U.S. designation for Soviet Yak 28 light bomber/interceptor aircraft
BTR-	- Soviet armored personnel carrier system
CDR	- commander
CO	- company
FEBA	- forward edge of the battle area
FROGFOOT	- U.S. designation for Soviet Su 25 ground attack turbojet aircraft
FSE	- (1) fire support element (2) Forward Security Element
GAZ-	- Gorkiy Motor Vehicle Plant (medium truck)
GMZ-	- Soviet mine laying system
HC	- white smoke
HE	- high explosive
HF	- high frequency
HIND	- U.S. designation for Mi-24 attack helicopter
IMR-	- Soviet armored engineer tractor system
km	- kilometer
KPH	- kilometers per hour
M	- meters
MDK-	- Soviet mine ditching machine system
Mi-	- Mil Helicopter Design Bureau
mm	- millimeter
MRR	- Motorized Rifle Regiment
OP	- observation post
PMN-	- Soviet anti personnel mine
RPG-	- Soviet rocket propelled grenade system
SA-	- Soviet surface to air missile system
SP	- self propelled
Su-	- Sukhov Aircraft Design Bureau
SWATTER	- U.S. designation for Soviet AT-2 guided missile
TM-	- Soviet anti tank mine
UHF	- ultra high frequency
VHF	- very high frequency
VX	- nerve agent
w/	- with
Yak-	- Yakovlev Aircraft Design Bureau
ZIL-	- Likhachev Motor Vehicle Plant (medium truck)

Figure A-1 (continued). Red vehicle symbols and terms used in threat arrays.

Initial Scenario Brief 1.0: Red Attack vs. Blue Defense

Threat Unit: Motorized Rifle Battalion with Tank Company Attached

Threat Composition: 12 T-80 tanks
24 BMP-2 Armored Infantry combat vehicles with AT-5,
30mm automatic gun, carrying infantry squads of
7 troops and one RPG-14 each
4 BMP-2 with AT-5 and 30mm automatic gun, command
vehicles

Threat Disposition at Initiation (see Figure A-2):

The formation occupies a frontage of 1500 meters and a depth of 400 meters.

The formation consists of three companies on line, with a tank platoon attached to each company.

Each company occupies a 500 meter front, and a depth of 400 meters.

Companies are separated by 50 meters. BMP within companies are separated by 50 - 100 meters.

Range Lines:
Line 0: 3000 meters
Line 1: 2000 meters
Line 2: 1000 meters
Line 3: 400 meters

Encounter Rates: For \geq 400 meters, 20 KPH. For \leq 400 meters, 6 KPH.
Traverse from Line 0 to Line 1 in 3 minutes.
Traverse from Line 1 to Line 2 in 3 minutes.
Traverse from Line 2 to Line 3 in 2 minutes.
Traverse from Line 3 to Blue platoon in 4 minutes.

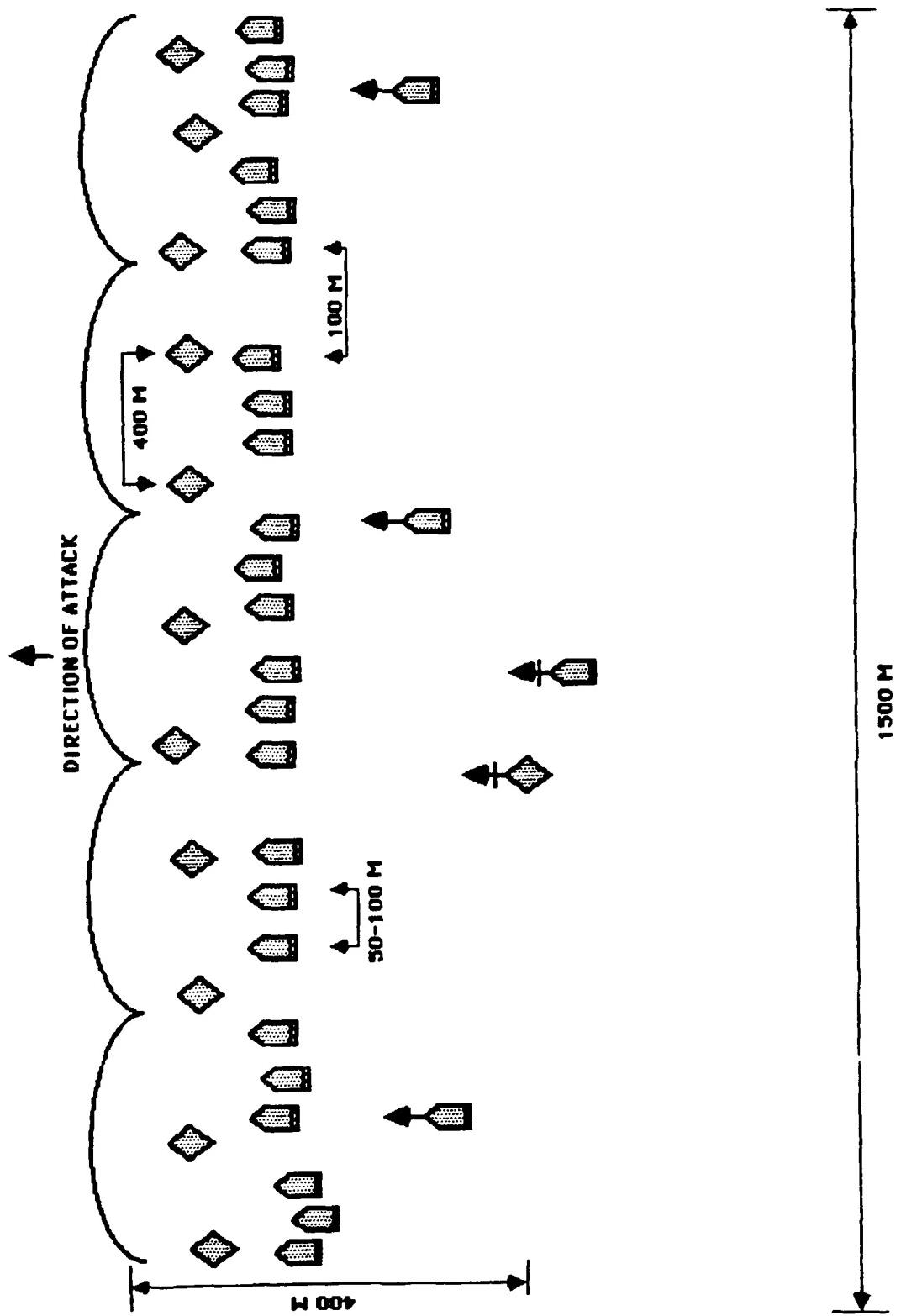


Figure A-2. Red attack vs. Blue defense (1.0.) (Motorized rifle battalion with attached tank company as part of regimental first echelon attack).

Subsequent Scenario Brief 1.1: Red Attack vs. Blue Defense

Threat Unit: Motorized Rifle Battalion with Tank Company Attached

Range Line: Line 1: 2000 meters

Loss Rate: High - 7 systems (7 systems cumulative)

Threat Composition: 10 T-80 tanks
19 BMP-2 Armored Infantry combat vehicles with AT-5,
30mm automatic gun, carrying rifle squads of
7 troops and one RPG-14 each
4 BMP-2 with AT-5 and 30mm automatic gun, command
vehicles

Threat Disposition at 2000 meters (see Figure A-3):

The Motorized Rifle Battalion has deployed into an attack formation. The formation is led by the tanks on line, followed by the infantry platoons, also on line.

The front and depth of the formation remains unchanged.

The formation occupies a frontage of 1500 meters and a depth of 400 meters.

The formation consists of three companies on line, with a tank platoon attached to each company.

Each company occupies a 500 meter front, and a depth of 400 meters.

Companies are separated by 50 meters. BMP within companies are separated by 50 - 100 meters.

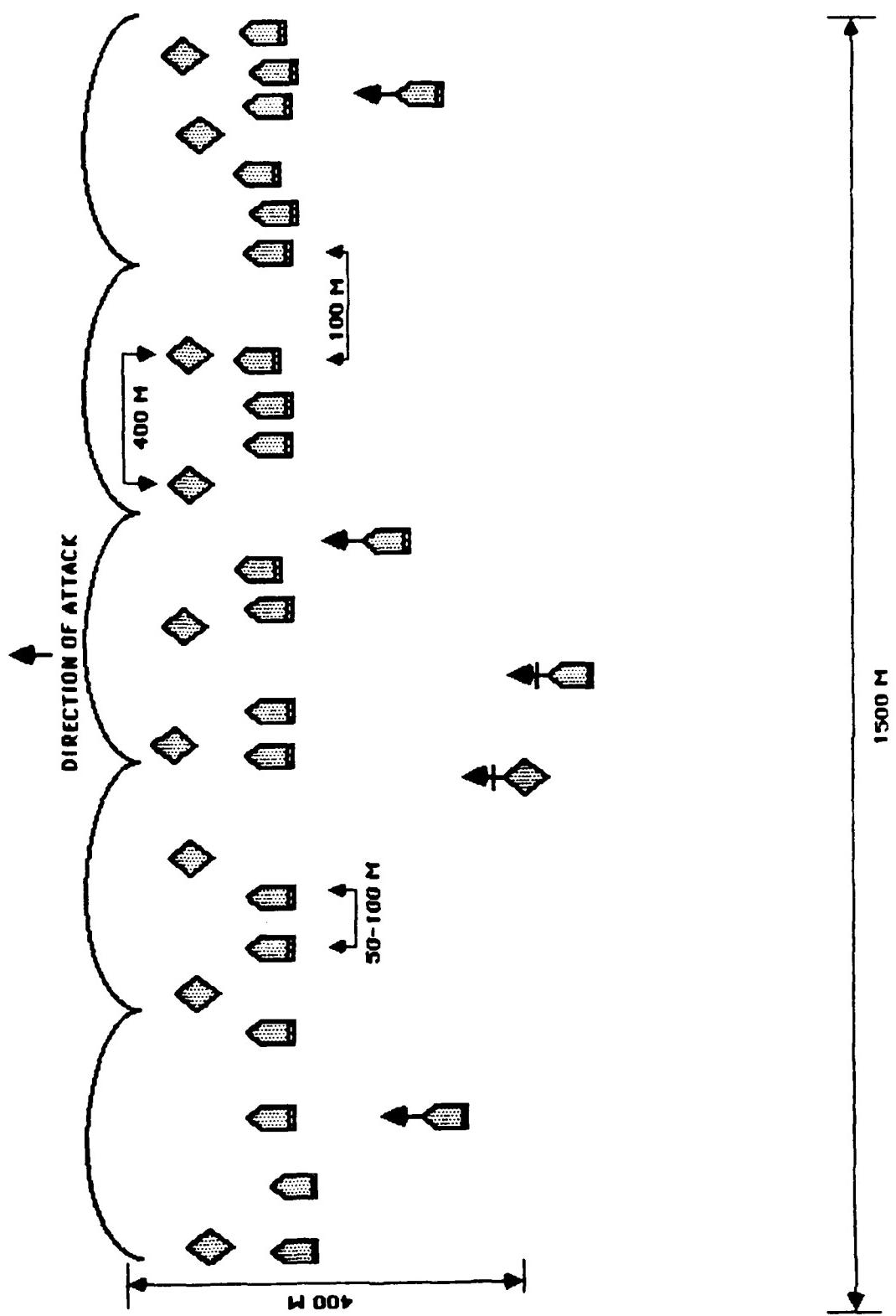


Figure A-3. Red attack vs. Blue defense (1.1.) (Motorized rifle battalion with attached tank company as part of regimental first echelon attack).

Subsequent Scenario Brief 1.2: Red Attack vs. Blue Defense

Threat Unit: Motorized Rifle Battalion with Tank Company Attached

Range Line: Line 2: 1000 meters

Loss Rate: High - 8 systems (15 systems cumulative)

Threat Composition: 8 T-80 tanks
14 BMP-2 Armored Infantry combat vehicles with AT-5,
30mm automatic gun, carrying rifle squads of
7 troops and one RPG-14 each
3 BMP-2 with AT-5 and 30mm automatic gun, command
vehicles

Threat Disposition at 1000 meters (see Figure A-4):

The frontage and depth of the formation is maintained but intervals among individual vehicles, platoons, and companies widen as vehicles maneuver to fill gaps caused by attrition.

The formation occupies a frontage of 1500 meters and a depth of 400 meters.

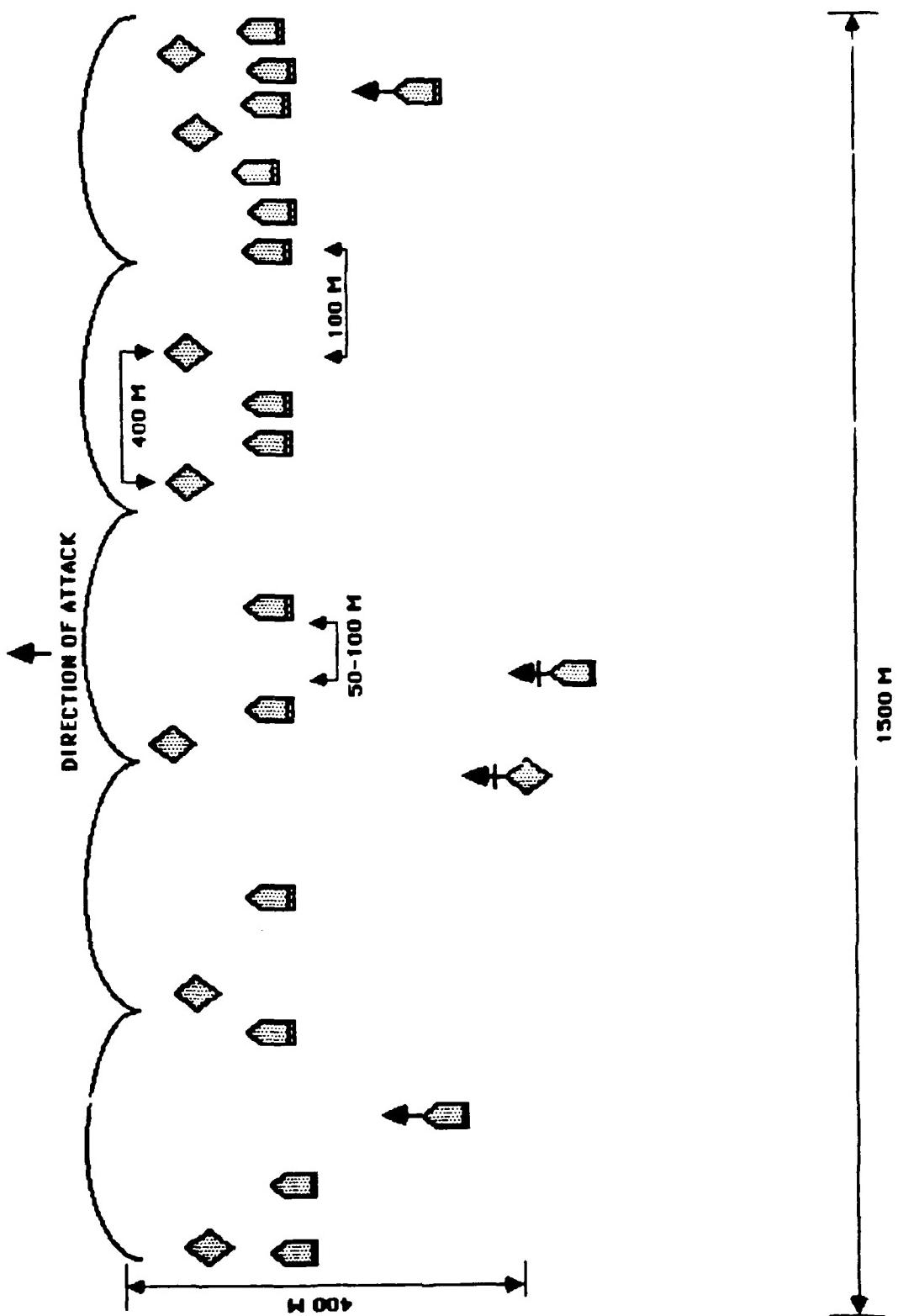


Figure A-4. Red attack vs. Blue defense (1.2.) (Motorized rifle battalion with attached tank company as part of regimental first echelon attack).

Subsequent Scenario Brief 1.3: Red Attack vs. Blue Defense

Threat Unit: Motorized Rifle Battalion with Tank Company Attached

Range Line: Line 3: 400 meters

Loss Rate: High - 5 systems (20 systems cumulative)

Threat Composition: 7 T-80 tanks
11 BMP-2 Armored Infantry combat vehicles with AT-5,
30mm automatic gun, carrying rifle squads of
7 troops and one RPG-14 each
2 BMP-2 with AT-5 and 30mm automatic gun, command
vehicles

Threat Disposition at 400 meters (see Figure A-5):

The speed of the formation has slowed to 6 KPH.
Companies remain separated by 50 meters, vehicles
within companies have closed to 50 - 100 meters of each
other. The infantry platoons are dismounted and
following behind the tanks. The BMPs are following the
dismounted infantry by 100 meters.

The overall formation width is reduced to 750 meters.
Second echelon, follow-on forces (not represented) are
moving forward to fill the attrition gaps and to expand
the battalion width back to 1500 meters.

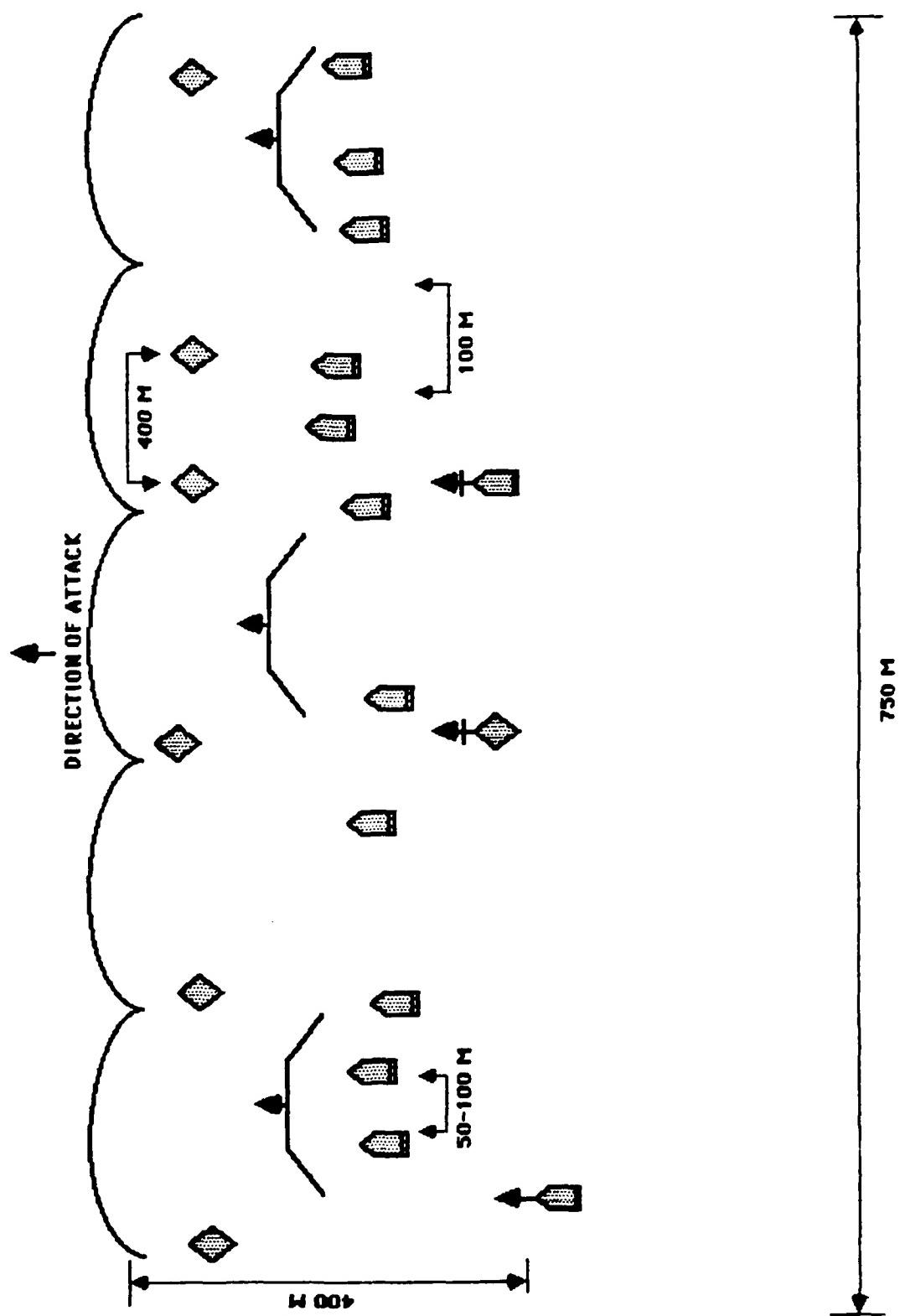


Figure A-5. Red attack vs. Blue defense (1.3.) (Motorized rifle battalion with attached tank company as part of regimental first echelon attack).

Subsequent Scenario Brief 1.4: Red Attack vs. Blue Defense

Threat Unit: Motorized Rifle Battalion with Tank Company Attached

Range Line: Line 1: 2000 meters

Loss Rate: Low - 3 systems (3 systems cumulative)

Threat Composition: 10 T-80 tanks
23 BMP-2 Armored Infantry combat vehicles with AT-5,
30mm automatic gun, carrying rifle squads of
7 troops and one RPG-14 each
4 BMP-2 with AT-5 and 30mm automatic gun, command
vehicles

Threat Disposition at 2000 meters (see Figure A-6):

The Motorized Rifle Battalion has deployed into an attack formation. The formation is led by the tanks on line, followed by the infantry platoons, also on line.

The front and depth of the formation remains unchanged.

The formation occupies a frontage of 1500 meters and a depth of 400 meters.

The formation consists of three companies on line, with a tank platoon attached to each company.

Each company occupies a 500 meter front, and a depth of 400 meters.

Companies are separated by 50 meters. BMP within companies are separated by 50 - 100 meters.

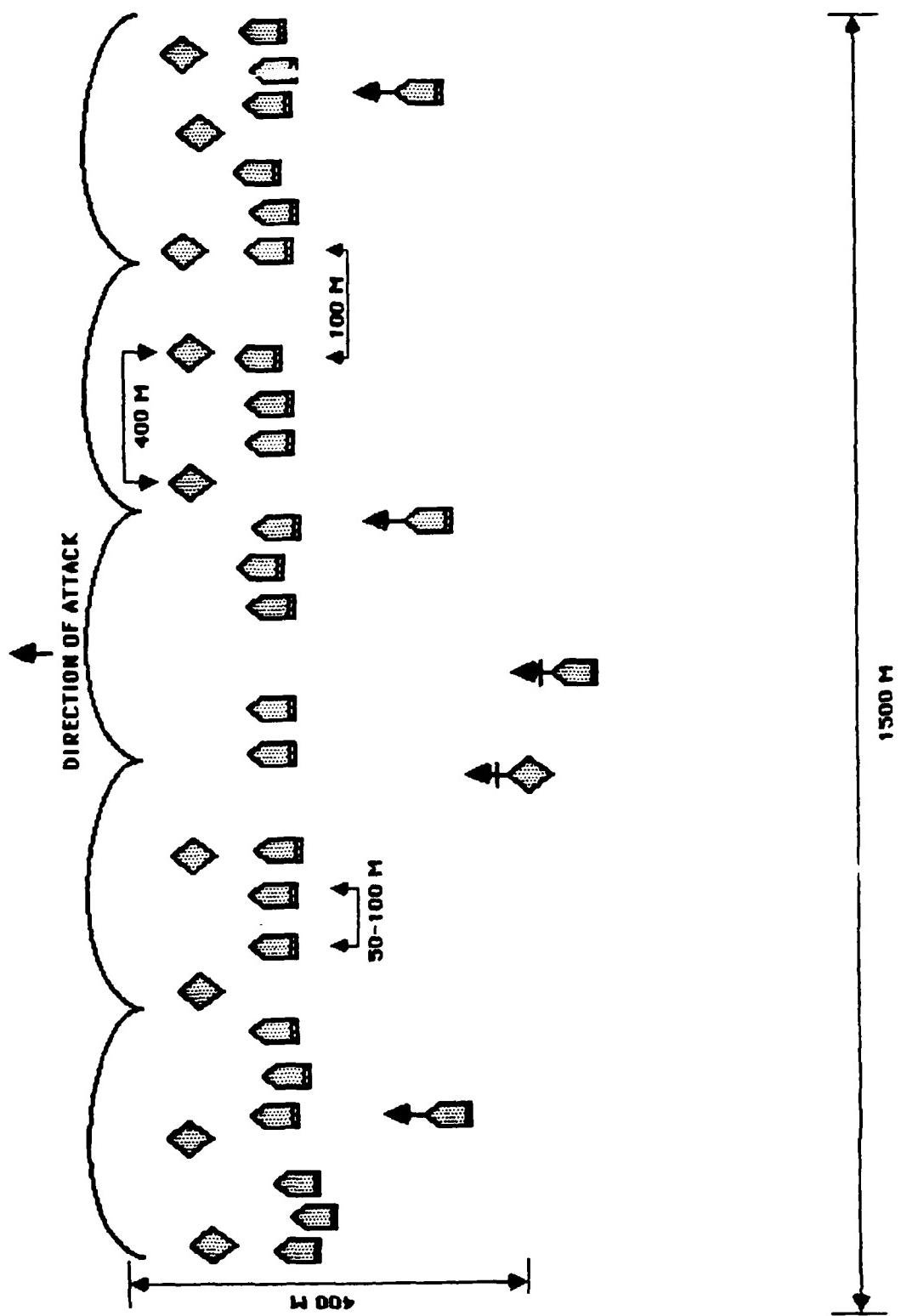


Figure A-6. Red attack vs. Blue defense (1.4.) (Motorized rifle battalion with attached tank company as part of regimental first echelon attack).

Subsequent Scenario Brief 1.5: Red Attack vs. Blue Defense

Threat Unit: Motorized Rifle Battalion with Tank Company Attached

Range Line: Line 2: 1000 meters

Loss Rate: Low - 3 systems (6 systems cumulative)

Threat Composition:

- 9 T-80 tanks
- 21 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 4 BMP-2 with AT-5 and 30mm automatic gun, command vehicles

Threat Disposition at 1000 meters (see Figure A-7):

The frontage and depth of the formation is unchanged. Intervals among individual vehicles adjust some to fill gaps in the formation caused by attrition.

The formation occupies a frontage of 1500 meters and a depth of 400 meters.

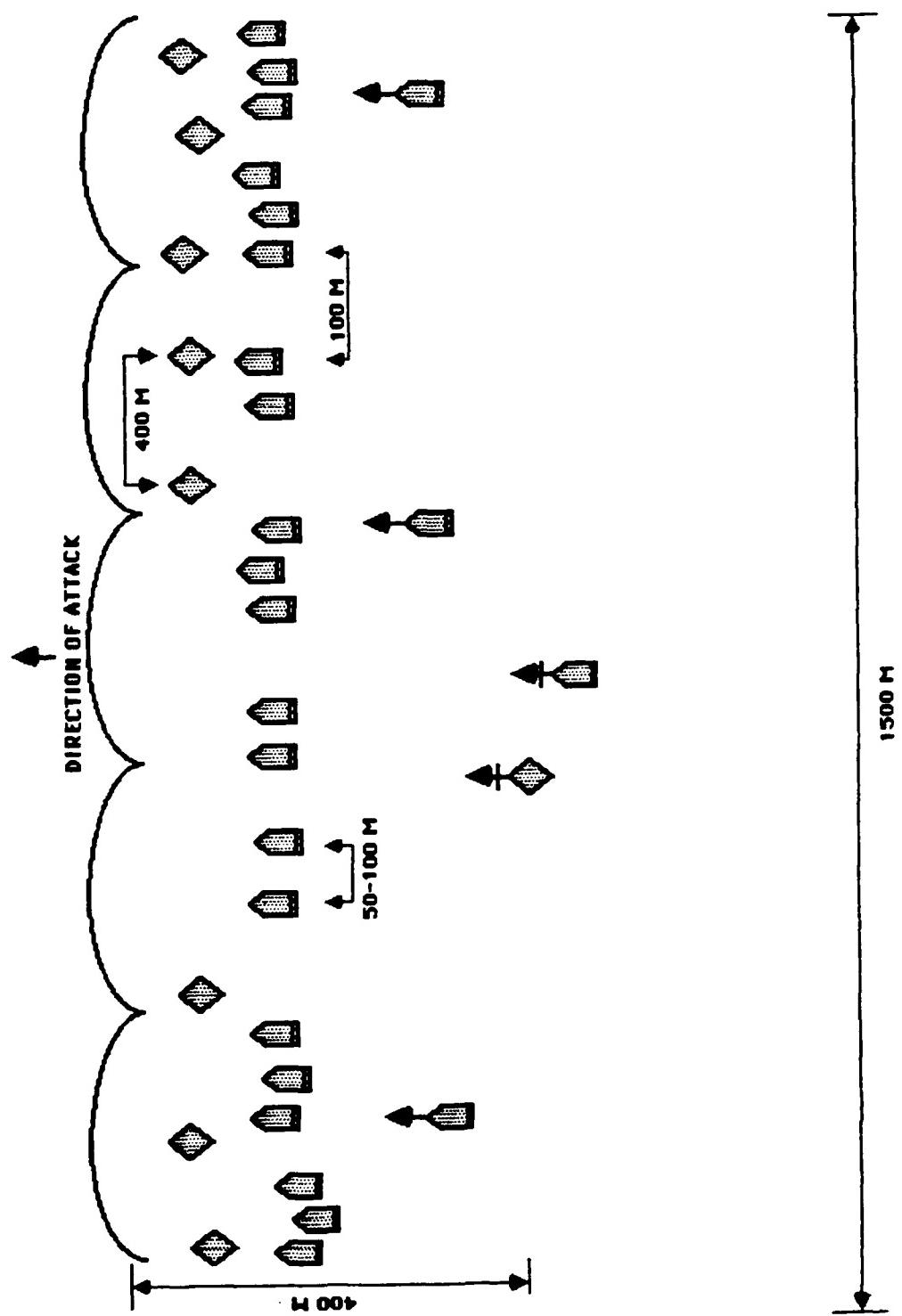


Figure A-7. Red attack vs. Blue defense (1.5.) (Motorized rifle battalion with attached tank company as part of regimental first echelon attack).

Subsequent Scenario Brief 1.6: Red Attack vs. Blue Defense

Threat Unit: Motorized Rifle Battalion with Tank Company Attached

Range Line: Line 3: 400 meters

Loss Rate: Low - 2 systems (8 systems cumulative)

Threat Composition: 8 T-80 tanks
20 BMP-2 Armored Infantry combat vehicles with AT-5,
30mm automatic gun, carrying rifle squads of
7 troops and one RPG-14 each
4 BMP-2 with AT-5 and 30mm automatic gun, command
vehicles

Threat Disposition at 400 meters (see Figure A-8):

The speed of the formation has slowed to 6 KPH.
Companies remain separated by 50 meters, vehicles
within companies have closed to 50 - 100 meters of each
other. The infantry platoons are dismounted and
following behind the tanks. The BMPs are following the
dismounted infantry by 100 meters.

The overall formation width remains intact at 1500
meters.

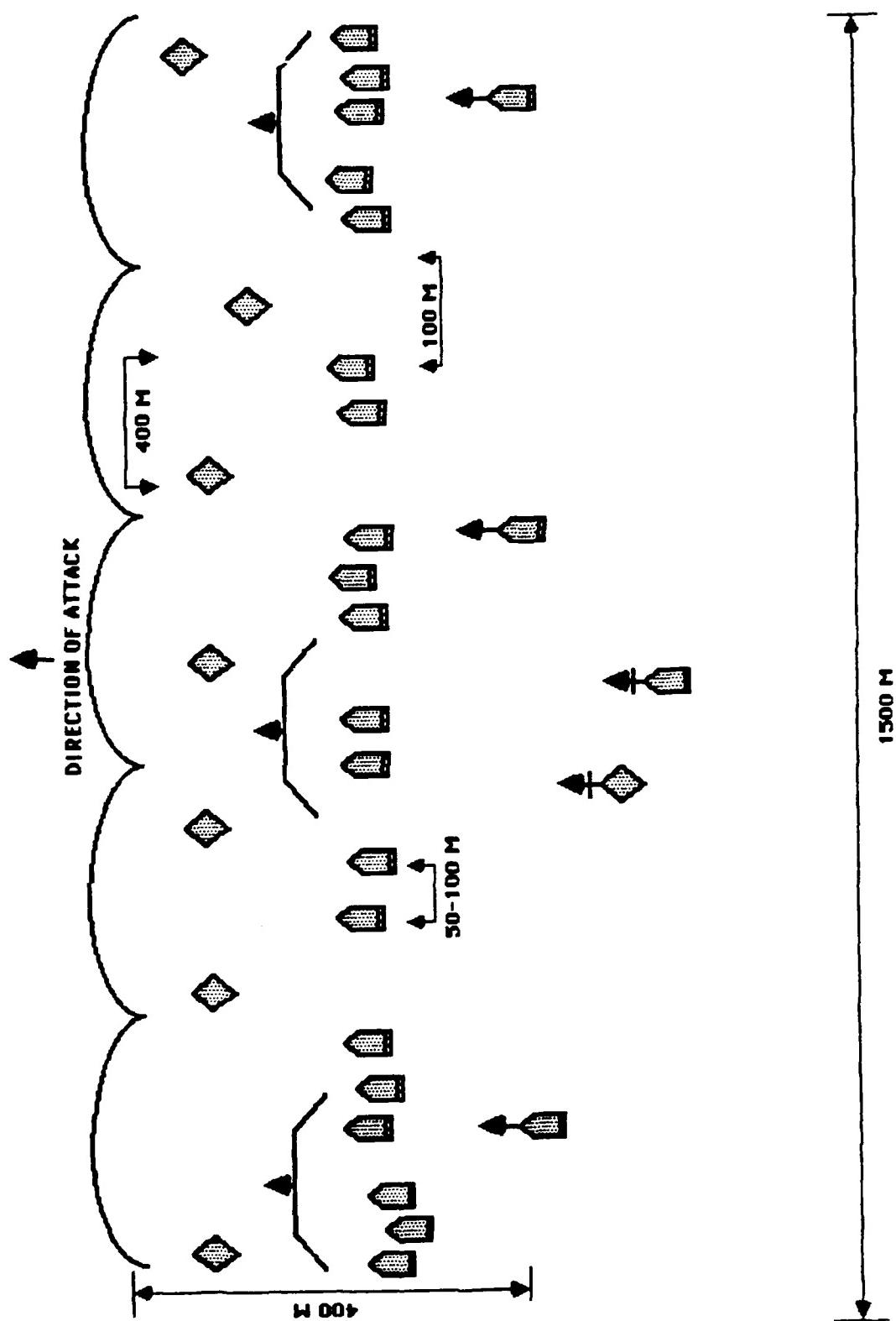


Figure A-8. Red attack vs. Blue defense (1.6.) (Motorized rifle battalion with attached tank company as part of regimental first echelon attack).

Initial Scenario Brief 2.0: Red Meeting Engagement vs. Blue Defense

Threat Unit: Motorized Rifle Company (Reinforced) (minus one platoon), as the Forward Security Element of the Advance Guard.

Threat Composition:

- 4 T-80 tanks
- 6 BMP-2 with AT-5 and 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
- 1 BMP-2 with AT-5, carrying anti-aircraft squad of 4 troops with 3 SA-14
- 1 BMP-2 with AT-5 and 30mm automatic gun, command vehicle
- 6 2S1 122mm SP howitzers
- 2 BMP-M1974 Artillery command/control vehicles

Threat Disposition at Initiation (see Figure A-9):

The formation occupies frontage of 400 meters and depth of 800 meters.

The formation is led by the tank platoon on line followed by two motorized rifle platoons in column. Rifle platoons follow 100 meters behind the tanks.

Tanks will be separated by 150 - 300 meters. Rifle platoon BMP are separated by 50 - 100 meters.

The FSE Commander is located centered in the formation and even with the rear of the rifle platoons. He is trailed by the weapon squad and AA squad.

The artillery battery and Battery Commander are located 1000 meters from the main body and 500 meters off the route of advance. They will maintain 20 - 40 meters between howitzers.

Range Lines:

- Line 0: 3000 meters
- Line 1: 2000 meters
- Line 2: 1000 meters
- Line 3: 400 meters

Encounter Rate: For \geq 400 meters, 20 KPH. For \leq 400 meters, 6 KPH.
Traverse from Line 0 to Line 1 in 3 minutes.
Traverse from Line 1 to Line 2 in 3 minutes.
Traverse from Line 2 to Line 3 in 2 minutes.
Traverse from Line 3 to Blue platoon in 4 minutes.

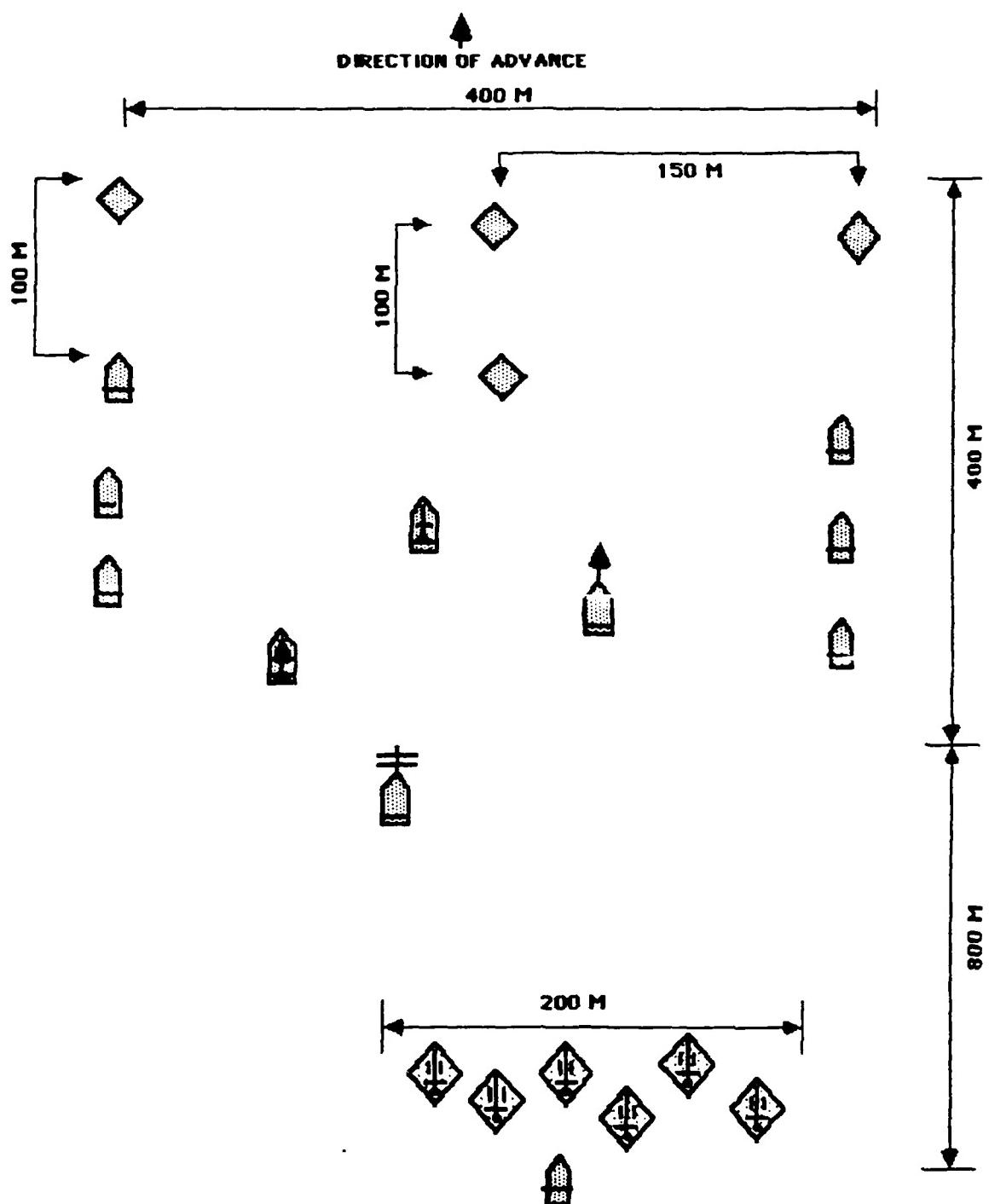


Figure A-9. Red meeting engagement vs. Blue defense (2.0.) (Motorized rifle company (reinforced) (minus one platoon) as the forward security element of the advance guard.

Subsequent Scenario Brief 2.1: Red Meeting Engagement vs. Blue Defense

Threat Unit: Motorized Rifle Company (Reinforced) (minus one platoon), as the Forward Security Element of the Advance Guard

Range Line: Line 1: 2000 meters

Loss Rate: High - 4 systems (4 system cumulative)

Threat Composition:

- 3 T-80 tanks
- 4 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
- 1 BMP-2 with AT-5, command vehicle
- 6 2S1 122mm SP howitzers
- 2 BMP-1974, Artillery command/control vehicles

Threat Disposition at 2000 meters (see Figure A-10):

The Motorized Rifle Company (reinforced) has deployed from a pre-battle formation to an attack formation. The attack formation is led by the tanks on line, followed by the two motorized rifle platoons, also on line.

The artillery has established an OP 400 meters to the rear of the main body. The artillery battery remains in its original location, now 1800 meters behind the main body.

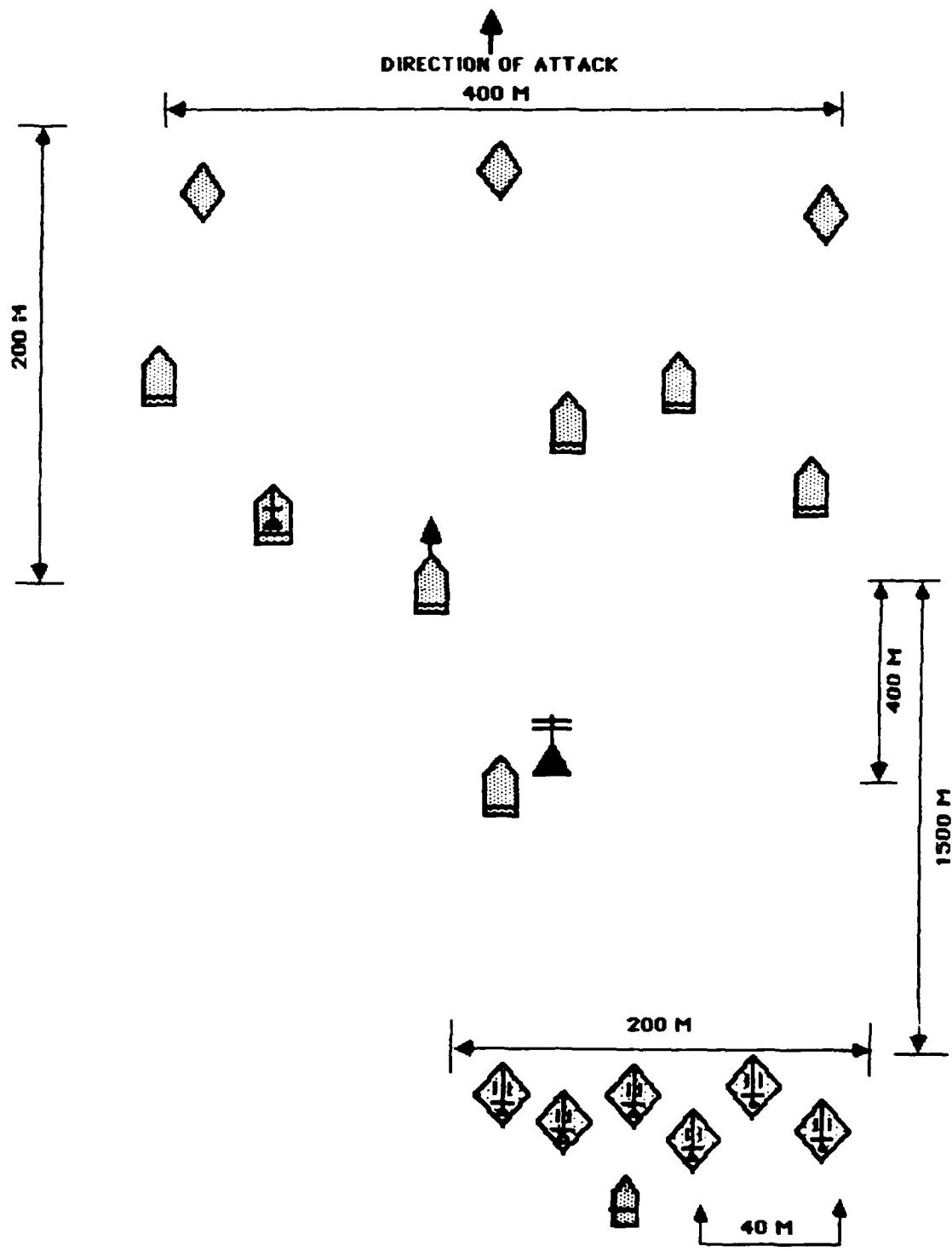


Figure A-10. Red meeting engagement vs. Blue defense (2.1.) (Motorized rifle company (reinforced) (minus one platoon) as the forward security element of the advance guard.

Subsequent Scenario Brief 2.2: Red Meeting Engagement vs. Blue Defense

Threat Unit: Motorized Rifle Company (Reinforced) (minus one platoon) as the Forward Security Element of the Advance Guard

Range Line: Line 2: 1000 meters

Loss Rate: High - 4 systems (8 systems cumulative)

Threat Composition:

- 3 T-80 tanks
- 3 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying anti-aircraft squad of 4 troops with 3 SA-14
- 1 BMP-2 with AT-5, command vehicle
- 4 2S1 122mm SP howitzers
- 1 BMP-1974, Artillery command/control vehicle

Threat Disposition at 1000 meters (see Figure A-11):

The Motorized Rifle Company (reinforced) continues in the attack formation, with tanks on line and preceding the motorized rifle platoons, which are also on line.

The size of the artillery is reduced by two guns. The battery has not relocated and is now located 2800 meters from the supported formation.

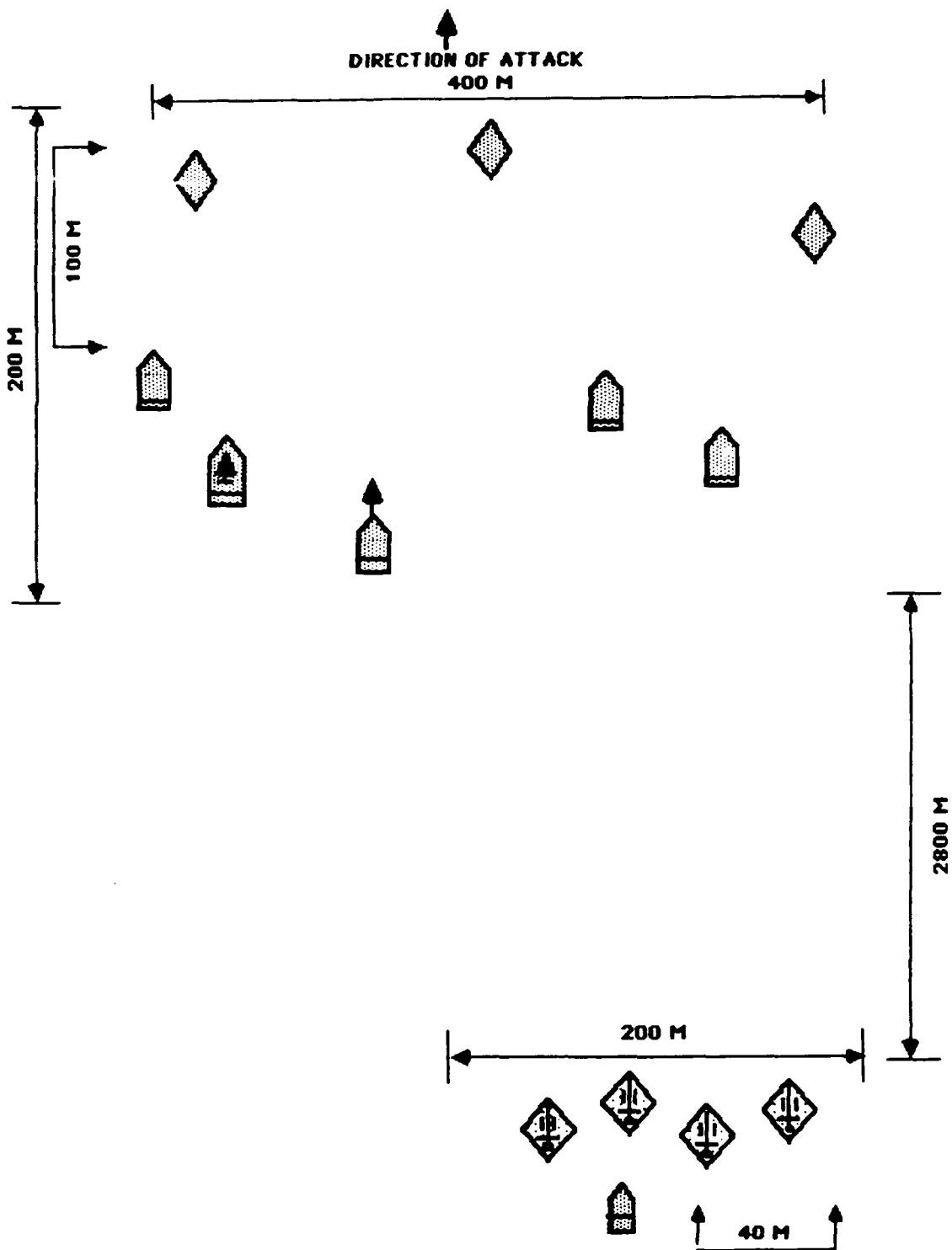


Figure A-11. Red meeting engagement vs. Blue defense (2.2.) (Motorized rifle company (reinforced) (minus one platoon) as the forward security element of the advance guard.

Subsequent Scenario Brief 2.3: Red Meeting Engagement vs. Blue Defense

Threat Unit: Motorized Rifle Company (Reinforced) (minus one platoon) as the Forward Security Element of the Advance Guard

Range Line: Line 3: 400 meters

Loss Rate: High - 3 systems (11 systems cumulative)

Threat Composition:

- 2 T-80 tanks
- 1 BMP-2 Armored Infantry combat vehicle with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14
- 1 BMP-2 with AT-5, carrying anti-aircraft squad of 4 troops with 3 SA-14
- 1 BMP-2 with AT-5, command vehicle
- 4 2S1 122mm SP howitzer
- 1 BMP-1974, Artillery command/control vehicle

Threat Disposition at 400 meters (see Figure A-12):

The Motorized Rifle Company is beginning the final phase of its attack. The tanks lead the formation, on line.

The infantry is now dismounted, advancing 50 meters behind the tanks. The remaining BMP, including the anti-aircraft squad, are supporting 50 meters behind the dismounted infantry.

The frontage of the assault remains at 400 meters.

The artillery battery remains in its original position; however, it is now located 3500 meters from the attack formation.

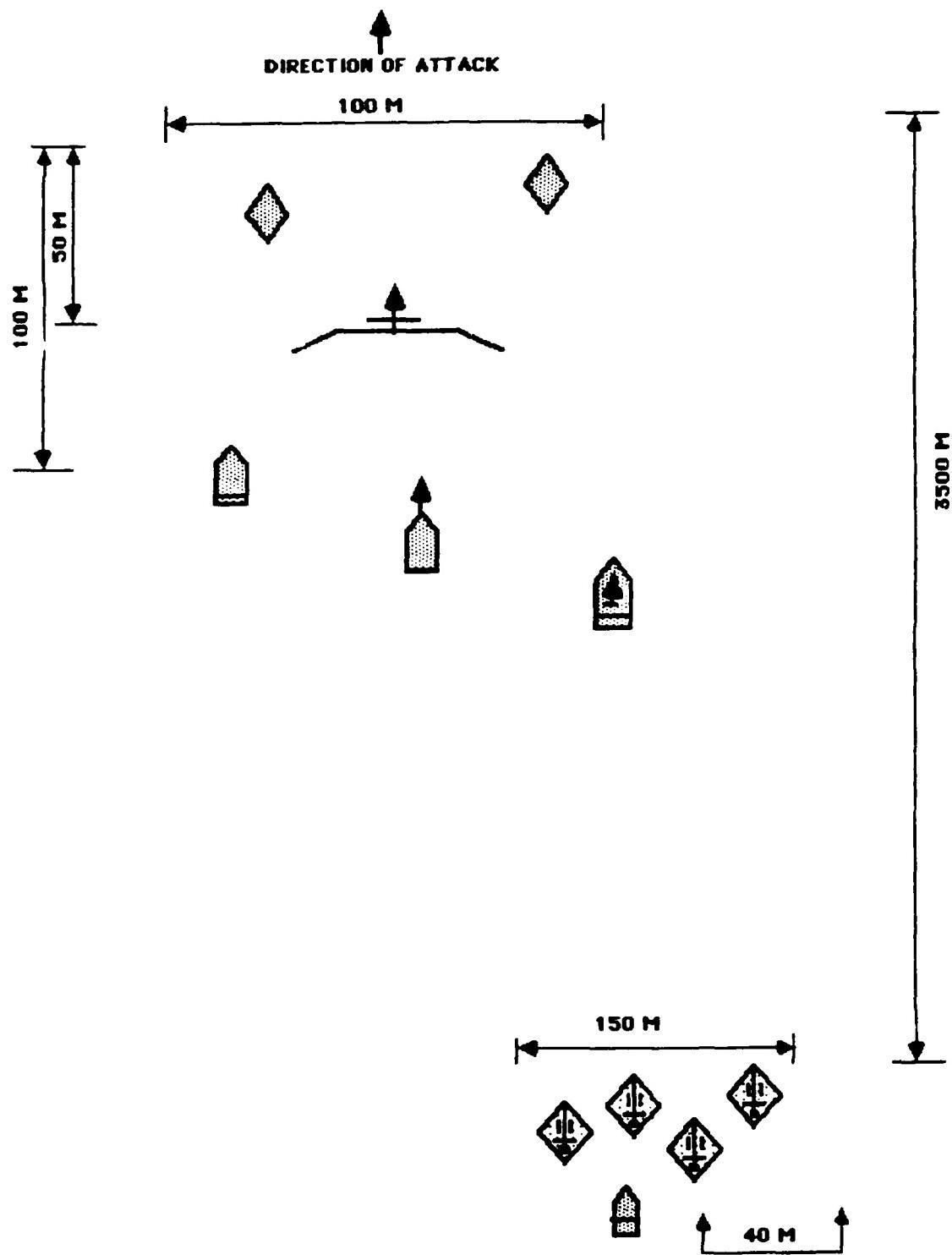


Figure A-12. Red meeting engagement vs. Blue defense (2.3.) (Motorized rifle company (reinforced) (minus one platoon) as the forward security element of the advance guard.

Subsequent Scenario Brief 2.4: Red Meeting Engagement vs. Blue Defense

Threat Unit: Motorized Rifle Company (Reinforced) (minus one platoon) as the Forward Security Element of the Advance Guard

Range Line: Line 1: 2000 meters

Loss Rate: Low - 1 system (1 system cumulative)

Threat Composition:

- 3 T-80 tanks
- 6 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
- 1 BMP-2 with AT-5, carrying anti-aircraft squad of 4 troops with 3 SA-14
- 1 BMP-2 with AT-5, command vehicle
- 6 2S1 122mm SP howitzers
- 2 BMP-1974, Artillery command/control vehicles

Threat Disposition at 2000 meters (see Figure A-13):

The Motorized Rifle Company (reinforced) has deployed from a pre-battle formation to an attack formation. The attack formation is led by the tanks on line, followed by the two motorized rifle platoons, also on line.

The artillery has established an OP 400 meters to the rear of the main body. The artillery battery remains in its original location, now 1800 meters behind the main body.

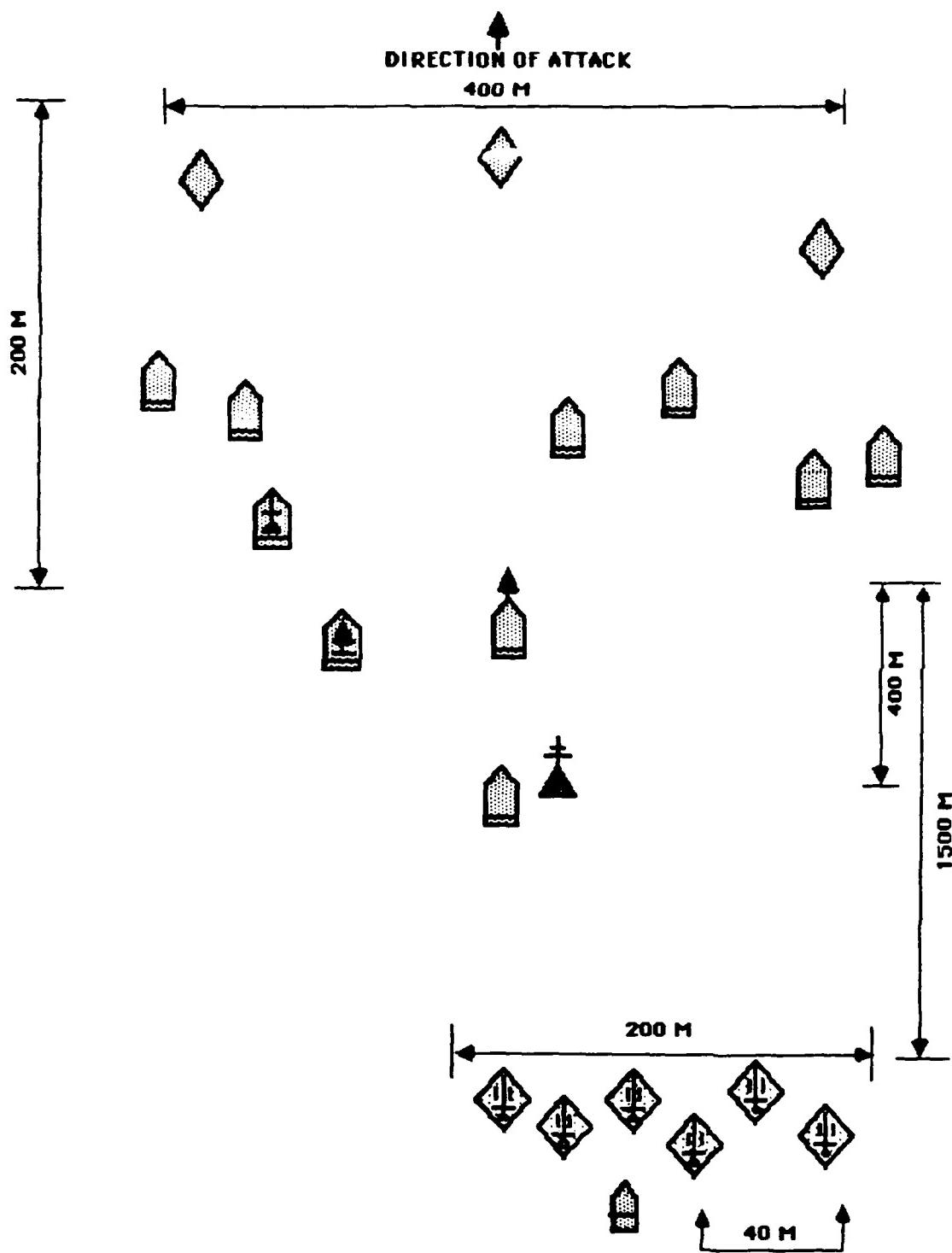


Figure A-13. Red meeting engagement vs. Blue defense (2.4.) (Motorized rifle company (reinforced) (minus one platoon) as the forward security element of the advance guard.

Subsequent Scenario Brief 2.5: Red Meeting Engagement vs. Blue Defense

Threat Unit: Motorized Rifle Company (Reinforced) (minus one platoon) as the Forward Security Element of the Advance Guard

Range Line: Line 2: 1000 meters

Loss Rate: Low - 2 systems (3 systems cumulative)

Threat Composition:

- 3 T-80 tanks
- 6 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5 carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
- 1 BMP-2 with AT-5, carrying anti-aircraft squad of 4 troops with 3 SA-14
- 1 BMP-2 with AT-5, command vehicle
- 5 2S1 122mm SP howitzers
- 1 BMP-1974, Artillery command/control vehicle

Threat Disposition at 1000 meters (see Figure A-14):

The Motorized Rifle Company (reinforced) continues in the attack formation, with tanks on line and preceding the motorized rifle platoons, which are also on line.

The size of the artillery is reduced by one gun. The battery has not relocated and is now located 2800 meters from the supported formation.

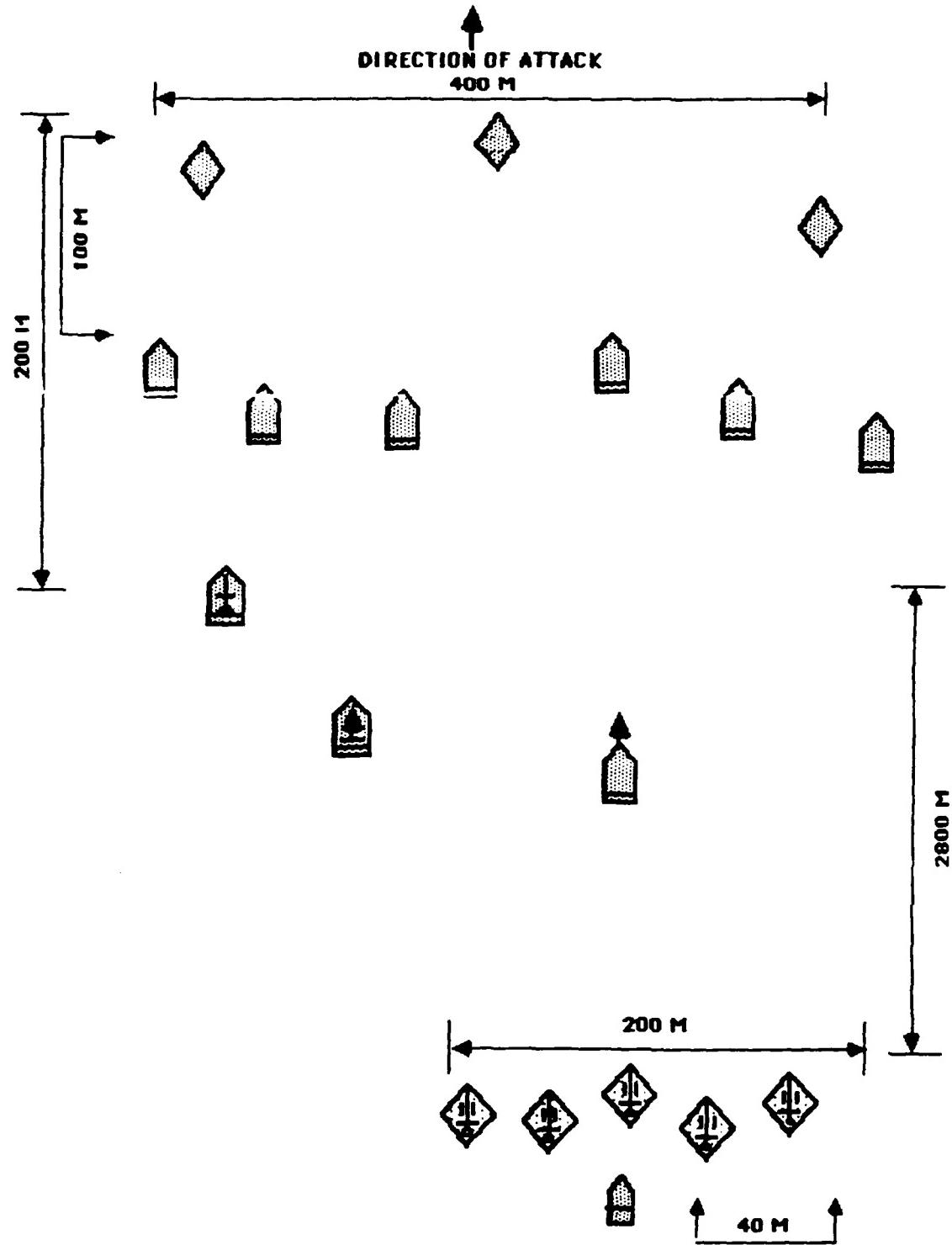


Figure A-14. Red meeting engagement vs. Blue defense (2.5.) (Motorized rifle company (reinforced) (minus one platoon) as the forward security element of the advance guard.

Subsequent Scenario Brief 2.6: Red Meeting Engagement vs. Blue Defense

Threat Unit: Motorized Rifle Company (Reinforced) (minus one platoon) as the Forward Security Element of the Advance Guard

Range Line: Line 3: 400 meters

Loss Rate: Low - 1 system (4 systems cumulative)

Threat Composition: 2 T-80 tanks
6 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
1 BMP-2 with AT-5, carrying anti-aircraft squad of 4 troops with 3 SA-14
1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
1 BMP-2 with AT-5, command vehicle
5 2S1 122mm SP howitzer
1 BMP-1974, Artillery command/control vehicle

Threat Disposition at 400 meters (see Figure A-15):

The Motorized Rifle Company is beginning the final phase of its attack. The tanks lead the formation, on line.

The infantry is now dismounted, advancing 50 meters behind the tanks. The remaining BMP, including the anti-aircraft squad, are supporting 50 meters behind the dismounted infantry.

The AGS-17 automatic grenade launcher squads have dismounted and taken up guard position to support the attack.

The frontage of the assault remains at 400 meters.

The artillery battery remains in its original position; however, it is now located 3500 meters from the attack formation.

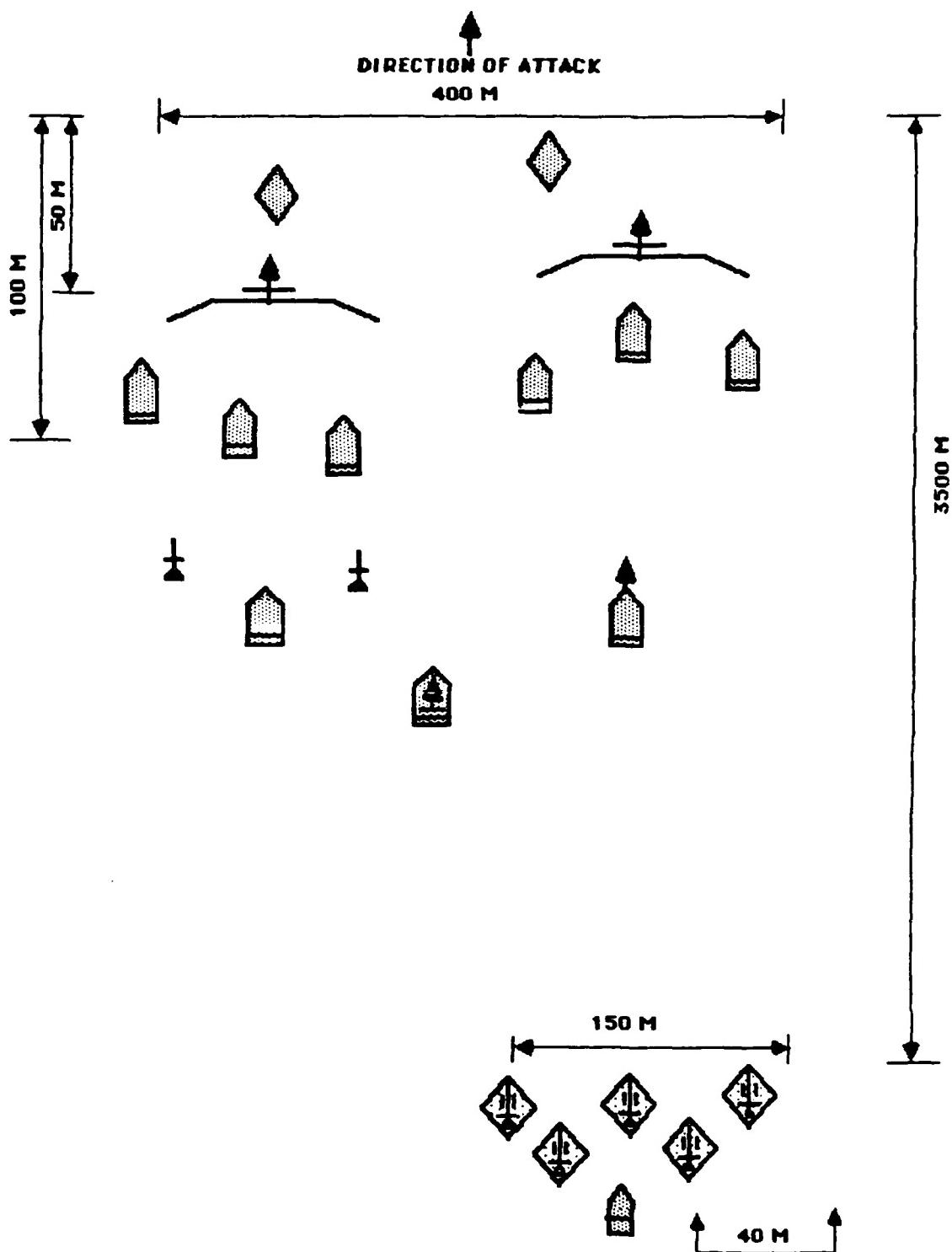


Figure A-15. Red meeting engagement vs. Blue defense (2.6.) (Motorized rifle company (reinforced) (minus one platoon) as the forward security element of the advance guard.

Initial Scenario Brief 3.0: Red Meeting Engagement vs. Blue Attack

Threat Unit: Motorized Rifle Company (Reinforced) from the Advance Guard Main Body

Threat Composition:

- 4 T-80 tanks
- 9 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
- 1 BMP-2 with AT-5, carrying anti-aircraft squad of 4 troops with 3 SA-14
- 1 BMP-2 with AT-5, command vehicle

Threat Disposition at Initiation (see Figure A-16):

The threat company is deployed in a wedge formation. The platoons are in column.

The center column consists of 2 tanks, a motorized rifle platoon, the weapons squad, the anti-aircraft squad, and the company commander.

Each of the flanking columns are led by a tank and followed by a motorized rifle platoon. The flanking columns are 150 meters on either side of the center column and 150 meters to the rear of the last BMP of the motorized rifle platoon in the center column.

The entire formation is 400 meters wide and 800 meters deep. Intervehicular distance varies from 50 - 100 meters.

Range Lines:

- Line 0: 3000 meters
- Line 1: 2000 meters
- Line 2: 1000 meters
- Line 3: 400 meters

Encounter Rate:

For \geq 400 meters, 20 KPH. For \leq 400 meters, 6 KPH.
Traverse from Line 0 to Line 1 in 1.5 minutes.
Traverse from Line 1 to Line 2 in 1.5 minutes.
Traverse from Line 2 to Line 3 in 1 minute.
Traverse from Line 3 to Blue position in 4 minutes.

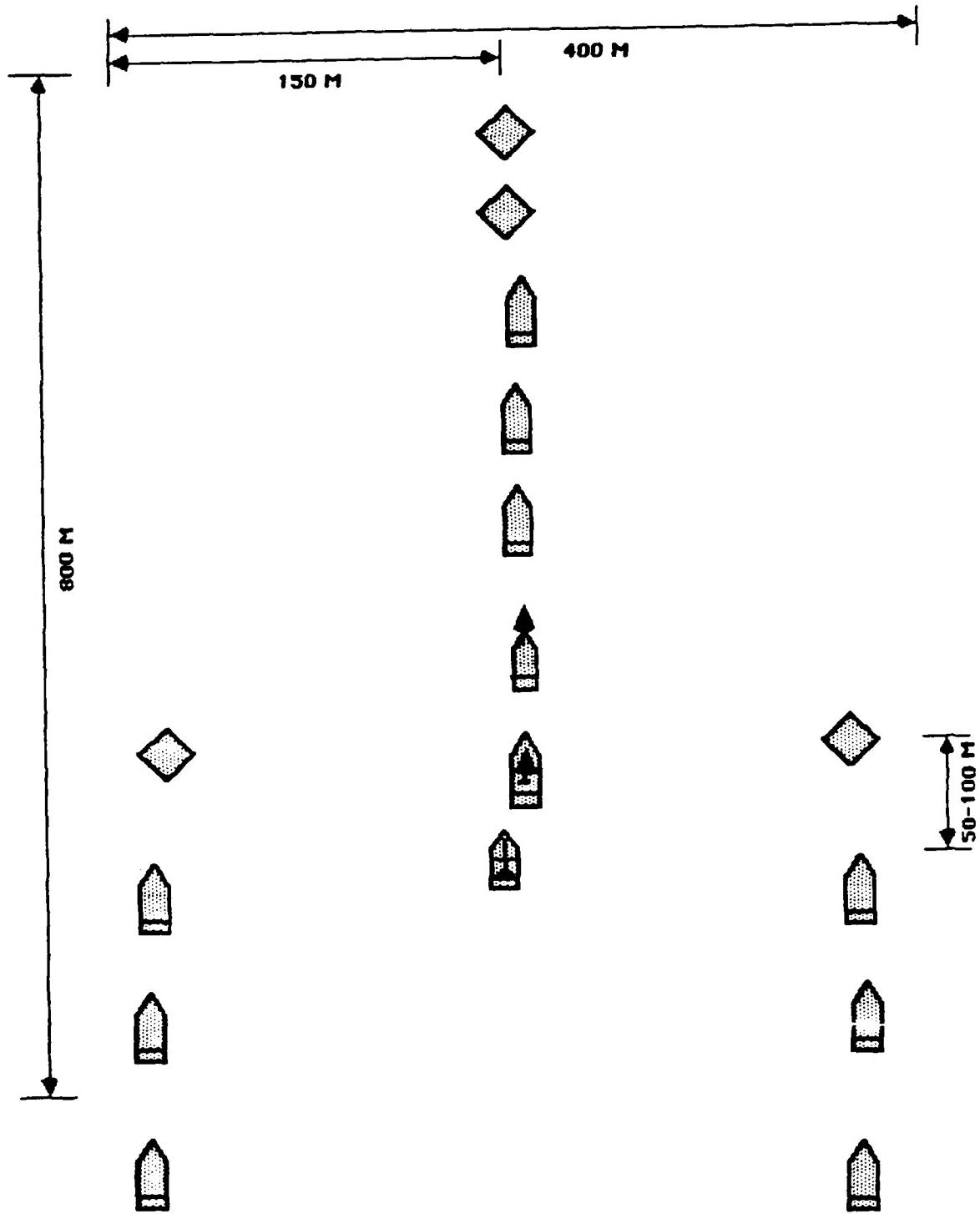


Figure A-16. Red meeting engagement vs. Blue attack (3.0.) (Motorized rifle company (reinforced) from the advance guard main body).

Subsequent Scenario Brief 3.1: Red Meeting Engagement vs. Blue Attack

Threat Unit: Motorized Rifle Company (Reinforced) from the Advance Guard Main Body

Range Line: Line 1: 2000 meters

Loss Rate: High - 3 systems (3 systems cumulative)

Threat Composition:

- 3 T-80 tanks
- 7 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
- 1 BMP-2 with AT-5, carrying anti-aircraft squad of 4 troops with 3 SA-14
- 1 BMP-2 with AT-5, command vehicle

Threat Disposition at 2000 meters (see Figure A-17):

The threat unit remains in a company wedge. Platoons remain in column, but prepare to move up on line behind the tanks.

The weapons squad begin to slow, looking for cover where they can emplace their AGS-17s on the ground.

The overall formation is 400 meters wide, by 800 meters deep.

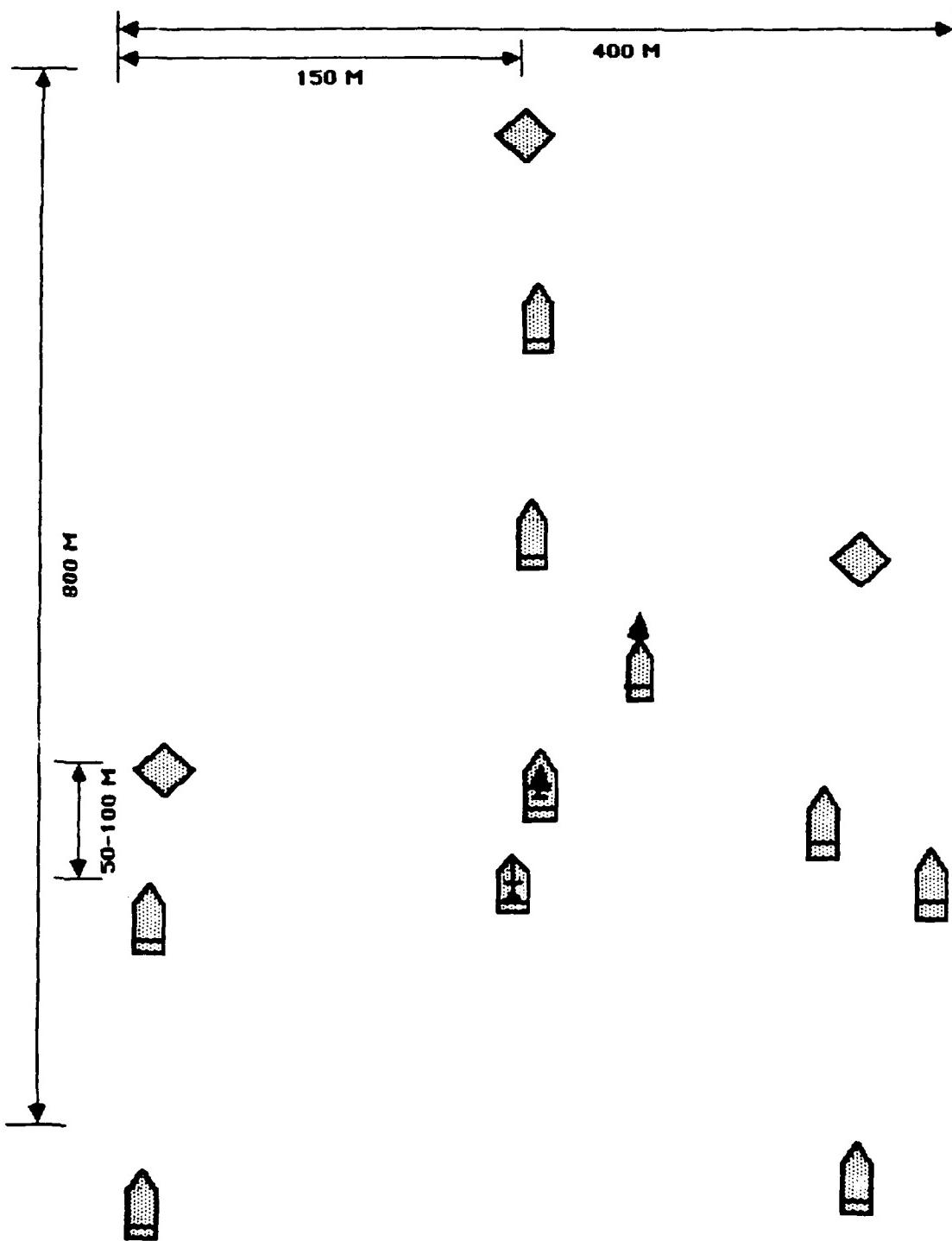


Figure A-17. Red meeting engagement vs. Blue attack (3.1.) (Motorized rifle company (reinforced) from the advance guard main body).

Subsequent Scenario Brief 3.2: Red Meeting Engagement vs. Blue Attack

Threat Unit: Motorized Rifle Company (Reinforced) from the Advance Guard Main Body

Range Line: Line 2: 1000 meters

Loss Rate: High - 3 systems (6 systems cumulative)

Threat Composition:

- 2 T-80 tanks
- 5 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
- 1 BMP-2 with AT-5, carrying anti-aircraft squad of 4 troops with 3 SA-14
- 1 BMP-2 with AT-5, command vehicle

Threat Disposition at 1000 meters (see Figure A-18):

The remaining tanks lead the formation and are about 400 meters apart.

The Infantry BMP are on line and within 100 meters of the tanks.

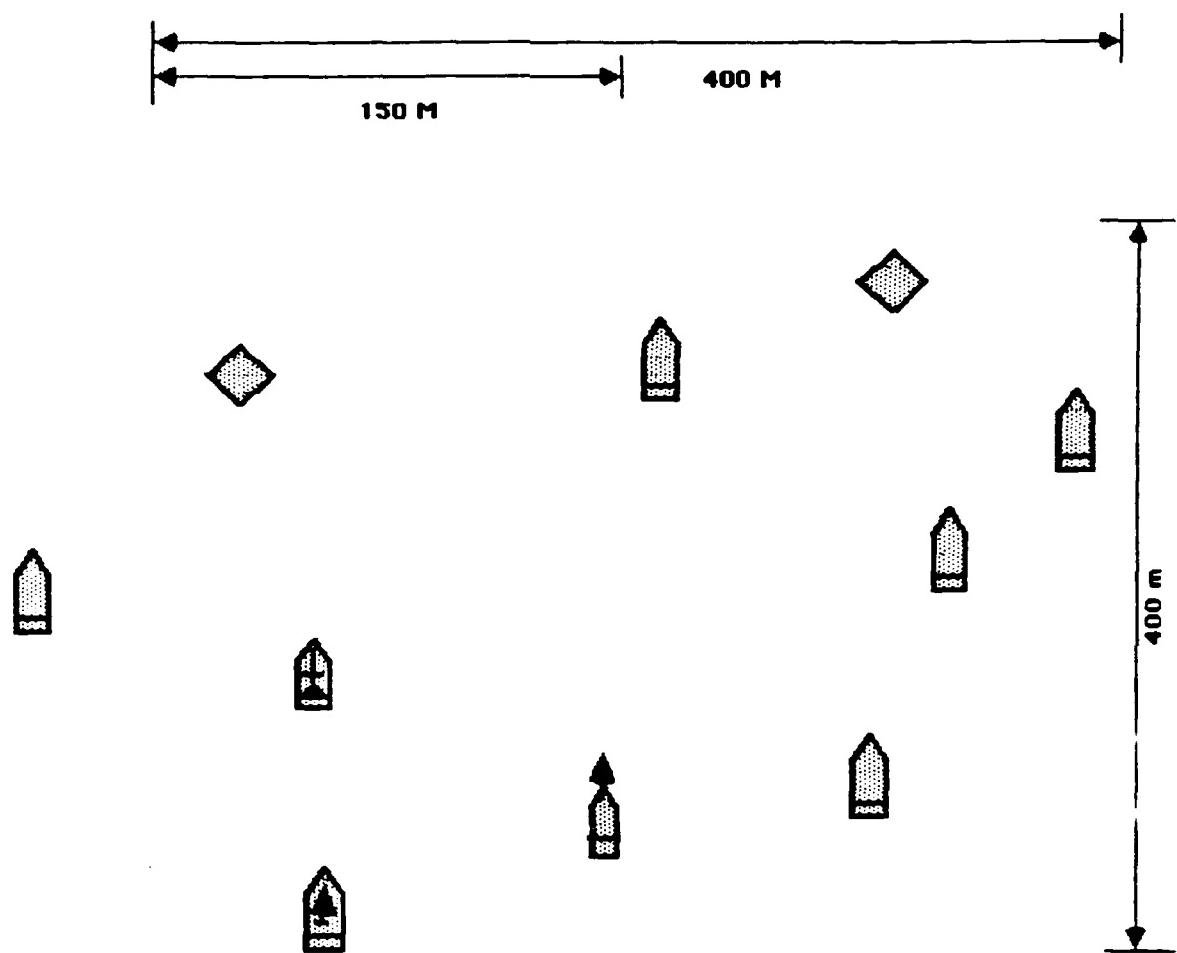


Figure A-18. Red meeting engagement vs. Blue attack (3.2.) (Motorized rifle company (reinforced) from the advance guard main body).

Subsequent Scenario Brief 3.3: Red Meeting Engagement vs. Blue Attack

Threat Unit: Motorized Rifle Company (Reinforced) from the Advance Guard Main Body

Range Line: Line 3: 400 meters

Loss Rate: High - 2 systems (8 systems cumulative)

Threat Composition:

- 2 T-80 tanks
- 3 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
- 1 BMP-2 with AT-5, carrying anti-aircraft squad of 4 troops with 3 SA-14
- 1 BMP-2 with AT-5, command vehicle

Threat Disposition at 400 meters (see Figure A-19):

The formation is slowed to 6 KPH and then halted. The high attrition has caused the Threat to go to ground and begin a hasty defense.

The tanks have found defensive positions and the BMPs are maneuvering into positions around them. The weapons squad has dismounted and deployed their AGS-17s for defensive fire.

The formation now is 400 meters wide by 250 meters deep.

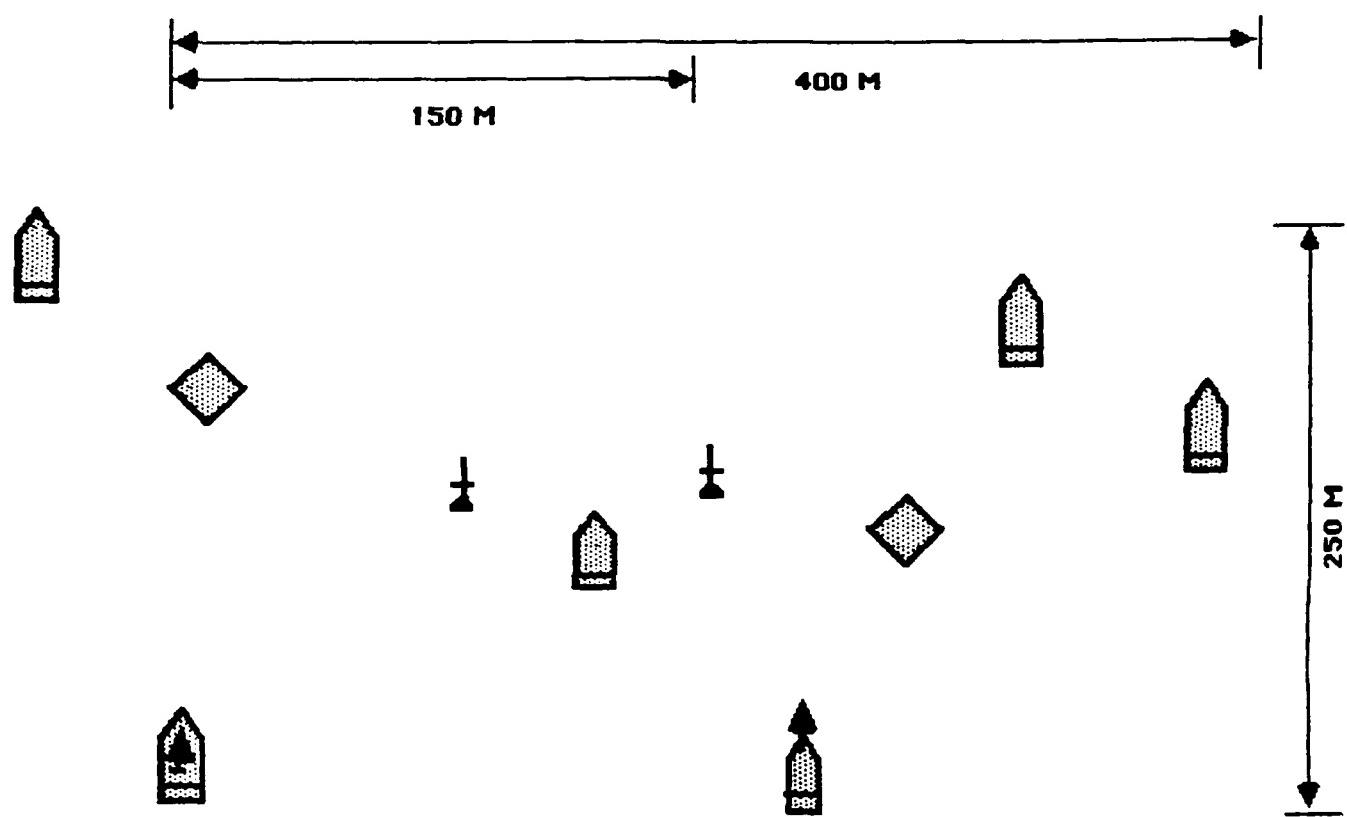


Figure A-19. Red meeting engagement vs. Blue attack (3.3.) (Motorized rifle company (reinforced) from the advance guard main body).

Subsequent Scenario Brief 3.4: Red Meeting Engagement vs. Blue Attack

Threat Unit: Motorized Rifle Company (Reinforced) from the Advance Guard Main Body

Range Line: Line 1: 2000 meters

Loss Rate: Low - 1 system (1 system cumulative)

Threat Composition:

- 3 T-80 tanks
- 9 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
- 1 BMP-2 with AT-5, carrying anti-aircraft squad of 4 troops with 3 SA-14
- 1 BMP-2 with AT-5, command vehicle

Threat Disposition at 2000 meters (see Figure A-20):

The threat company remains in a company wedge. Platoons remain in column, but prepare to move up on line behind the tanks.

The weapons squad begins to slow, looking for cover where they can emplace their AGS-17s on the ground.

The overall formation is 400 meters wide and 800 meters deep.

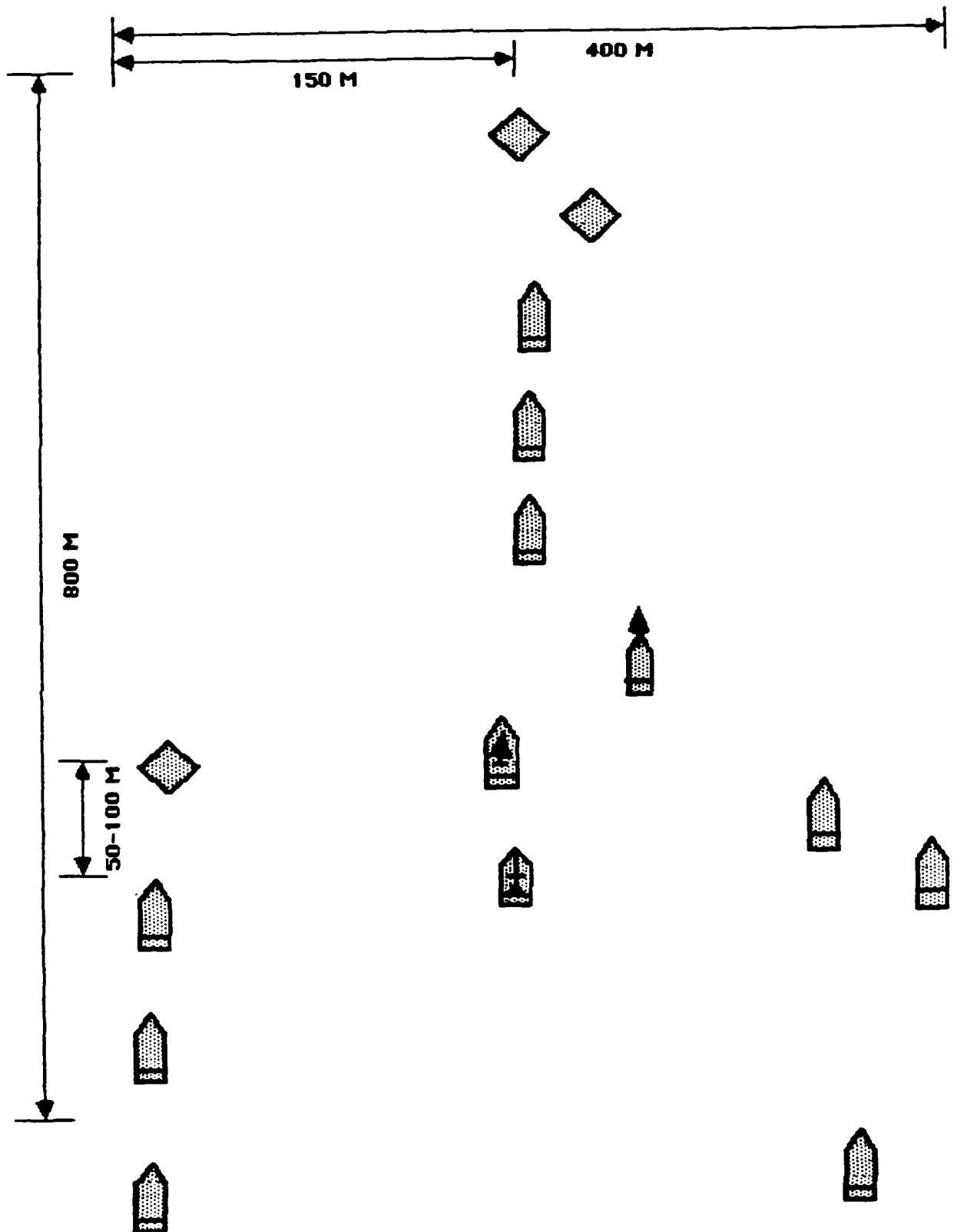


Figure A-20. Red meeting engagement vs. Blue attack (3.4.) (Motorized rifle company (reinforced) from the advance guard main body).

Subsequent Scenario Brief 3.5: Red Meeting Engagement vs. Blue Attack

Threat Unit: Motorized Rifle Company (Reinforced) from the Advance Guard Main Body

Range Line: Line 2: 1000 meters

Loss Rate: Low - 1 system (2 systems cumulative)

Threat Composition:

- 3 T-80 tanks
- 9 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
- 1 BMP-2 with AT-5, carrying anti-aircraft squad of 4 troops with 3 SA-14
- 1 BMP-2 with AT-5, command vehicle

Threat Disposition at 1000 meters (see Figure A-21):

The tanks continue to lead while the BMPs have gone into a line formation. Ground combat elements maintain a 400 meter front and follow 100 meters behind the tanks.

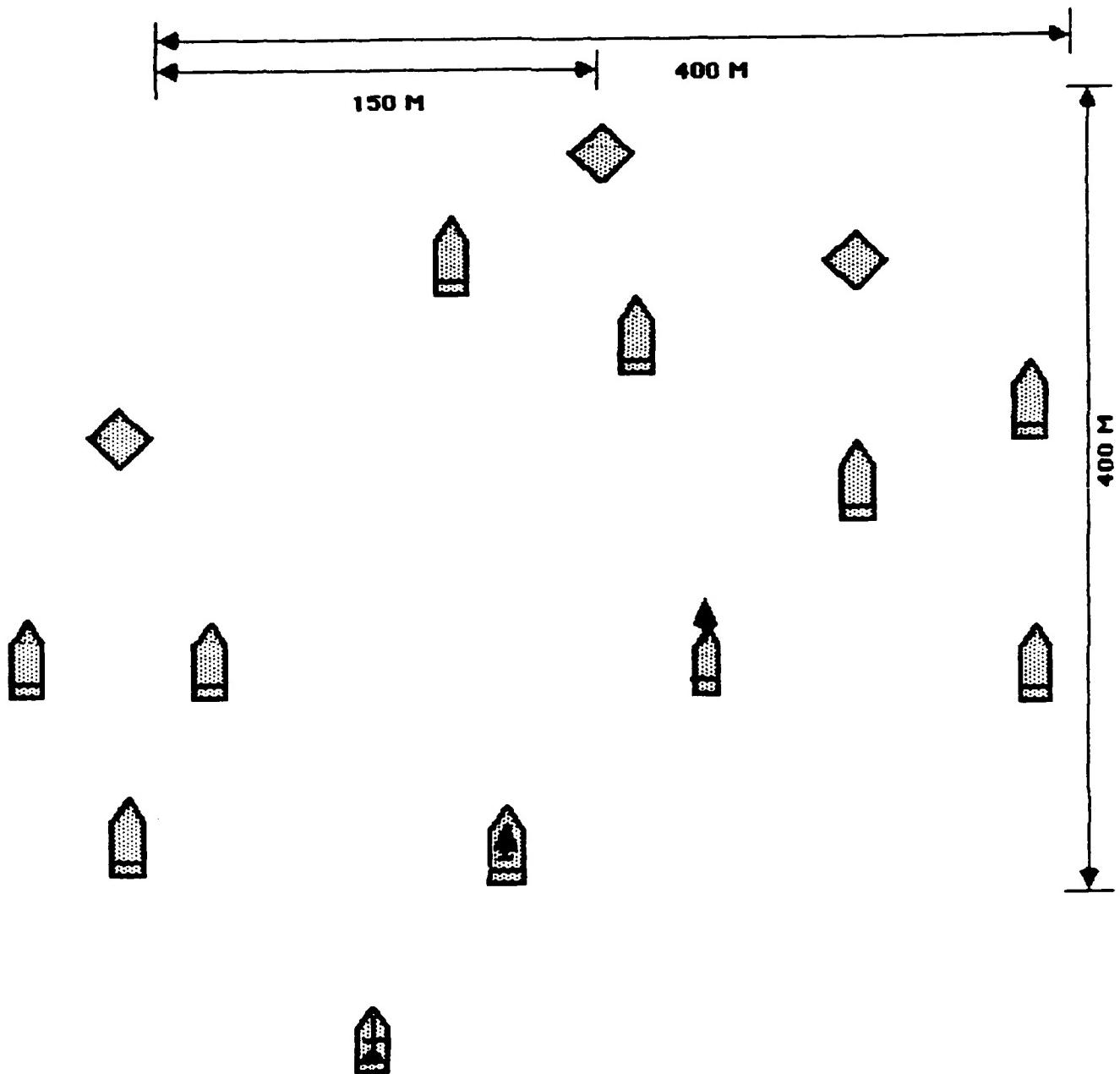


Figure A-21. Red meeting engagement vs. Blue attack (3.5.) (Motorized rifle company (reinforced) from the advance guard main body).

Subsequent Scenario Brief 3.6: Red Meeting Engagement vs. Blue Attack

Threat Unit: Motorized Rifle Company (Reinforced) from the Advance Guard Main Body

Range Line: Line 3: 400 meters

Loss Rate: Low - 1 system (3 systems cumulative)

Threat Composition:

- 3 T-80 tanks
- 7 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
- 1 BMP-2 with AT-5, carrying anti-aircraft squad of 4 troops with 3 SA-14
- 1 BMP-2 with AT-5, command vehicle

Threat Disposition at 400 meters (see Figure A-22):

The company has gone into its assault formation. The infantry has dismounted and the movement rate has slowed to 6 KPH.

The AGS-17 have been dismounted and are supporting the assault.

The overall formation is 400 meters wide and 250 meters deep.

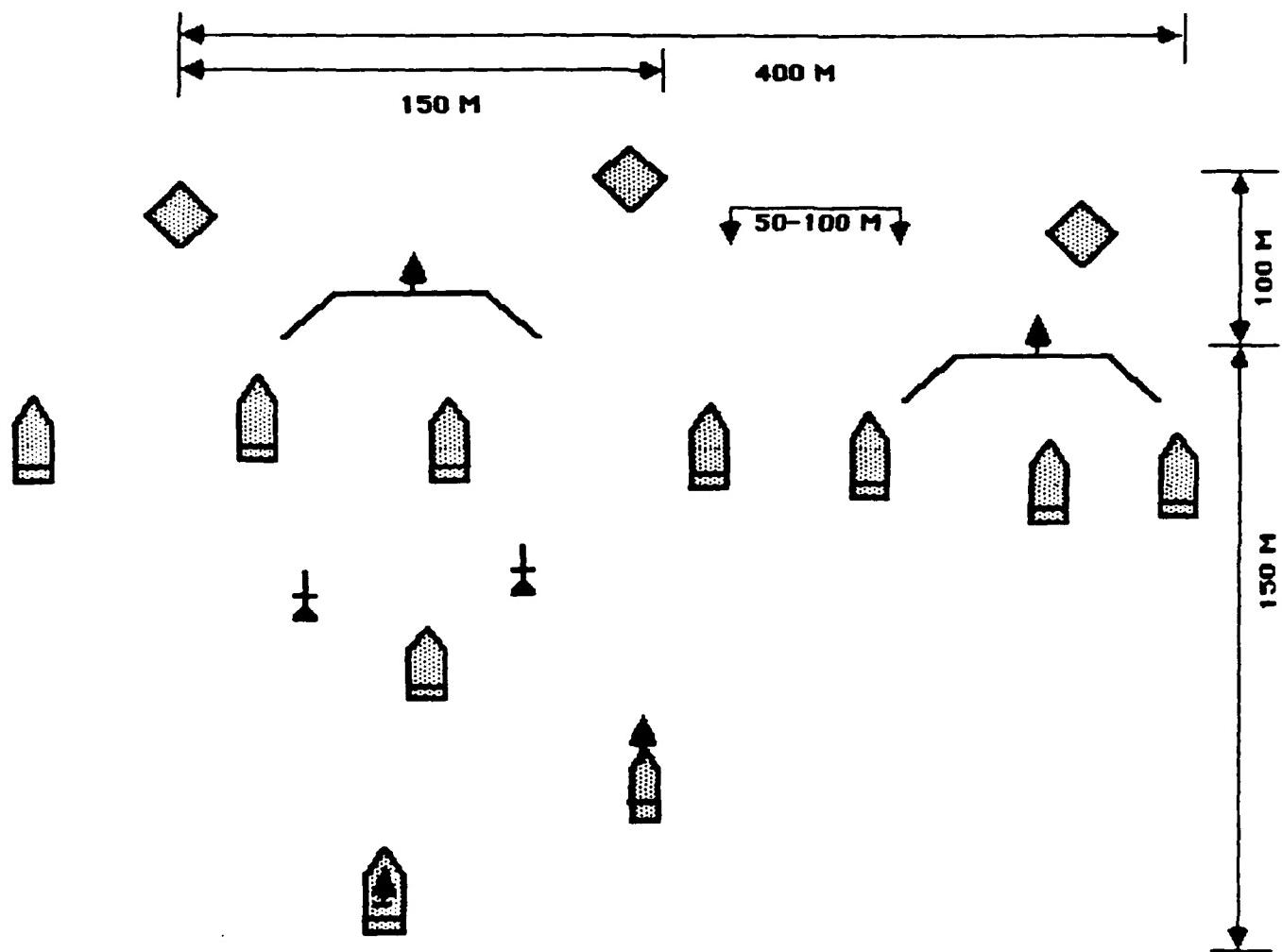


Figure A-22. Red meeting engagement vs. Blue attack (3.6.) (Motorized rifle company (reinforced) 1.0m the advance guard main body).

Initial Scenario Brief 4.0: Red Deliberate Defense vs. Blue Attack

Threat Unit: Motorized Rifle Company (Reinforced) in the First Echelon Main Defense Belt

Threat Composition:

- 4 T-80 tanks
- 9 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
- 1 BMP-2 with AT-5, carrying anti-aircraft squad of 4 troops with 3 SA-14
- 1 BMP-2 with AT-5, command vehicle

Threat Disposition at Initiation (see Figure A-23):

The company is occupying a strong point in an area 500 meters wide and 250 meters deep. All elements are occupying prepared positions and have prepared alternate and supplemental positions.

Motorized rifle platoons are separated by 100 meters. Infantry troops are dismounted and dug in.

The tank platoon is integrated into the company force. Each tank is at least 200 meters from another tank. Intervehicular distance varies between 50 to 100 meters.

Range Lines:

- Line 0: 3000 meters
- Line 1: 2000 meters
- Line 2: 1000 meters
- Line 3: 400 meters

Encounter Rate:

For \geq 400 meters, 20 KPH. For \leq 400 meters, 6 KPH.
Traverse from Line 0 to Line 1 in 3 minutes.
Traverse from Line 1 to Line 2 in 3 minutes.
Traverse from Line 2 to Line 3 in 2 minutes.
Traverse from Line 3 to Red position in 4 minutes.

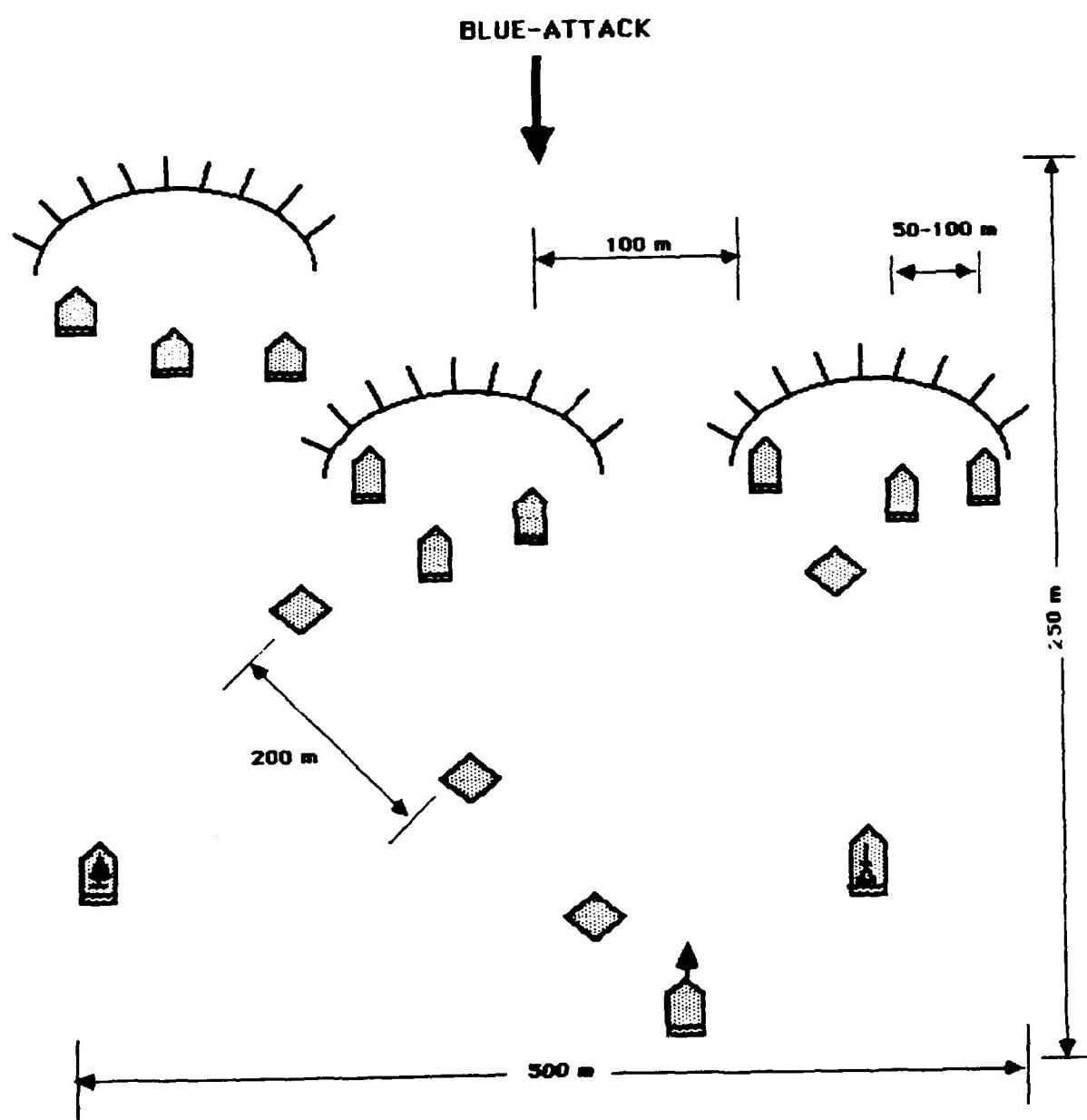


Figure A-23. Red deliberate defense vs. Blue attack (4.0.) (Motorized rifle company (reinforced) deployed in first echelon main defense belt).

Subsequent Scenario Brief 4.1: Red Deliberate Defense vs. Blue Attack

Threat Unit: Motorized Rifle Company (Reinforced) in the First Echelon Main Defense Belt

Range Line: Line 1: 2000 meters

Loss Rate: High - 2 systems (2 systems cumulative)

Threat Composition:

- 4 T-80 tanks
- 7 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
- 1 BMP-2 with AT-5, carrying anti-aircraft squad of 4 troops with 3 SA-14
- 1 BMP-2 with AT-5, command vehicle

Threat Disposition at 2000 meters (see Figure A-24):

The company continues to occupy its prepared defensive positions.

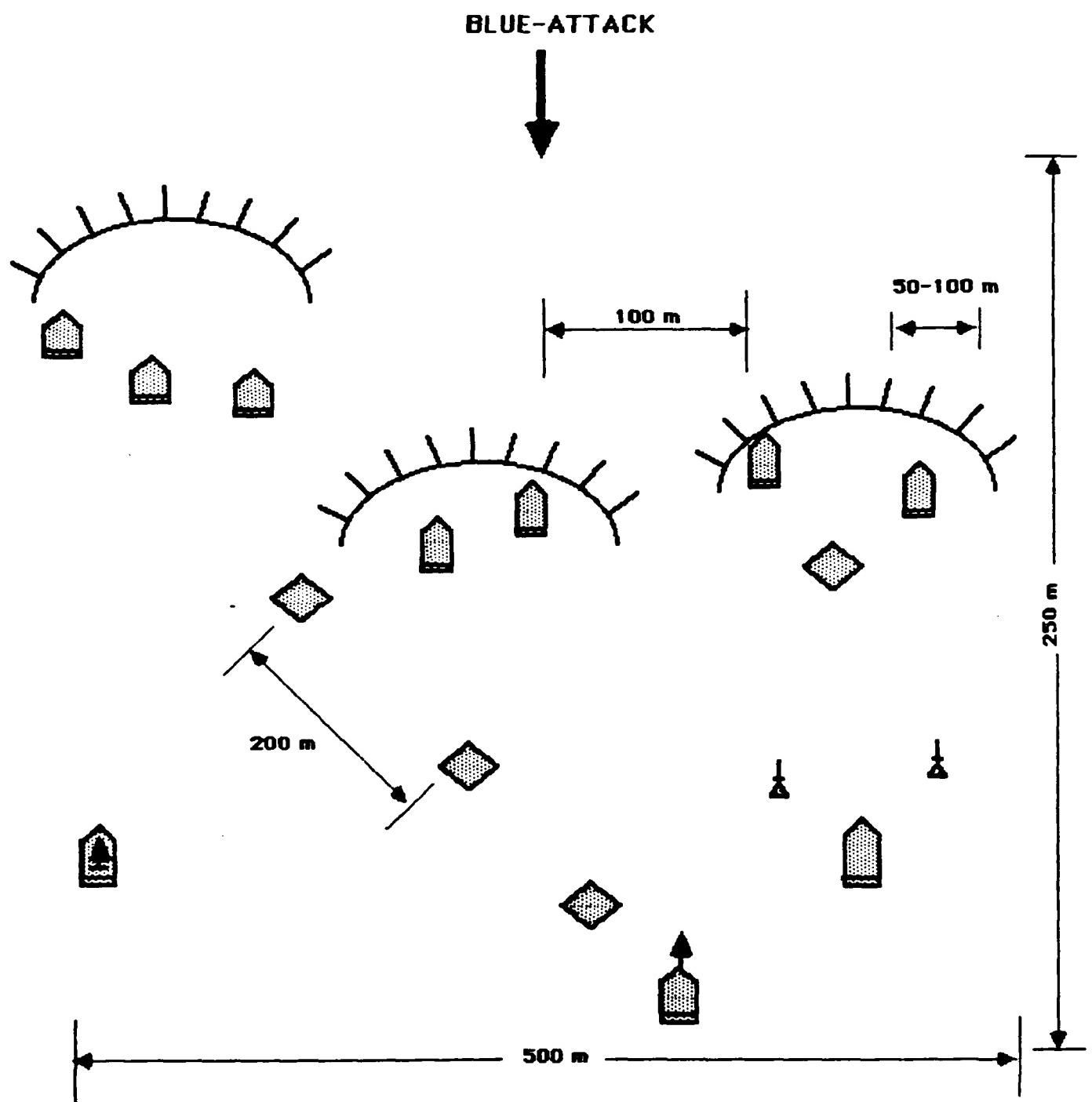


Figure A-24. Red deliberate defense vs. Blue attack (4.1.) (Motorized rifle company (reinforced) deployed in first echelon main defense belt).

Subsequent Scenario Brief 4.2: Red Deliberate Defense vs. Blue Attack

Threat Unit: Motorized Rifle Company (Reinforced) in the First Echelon Main Defense Belt

Range Line: Line 2: 1000 meters

Loss Rate: High - 4 systems (6 systems cumulative)

Threat Composition:

- 2 T-80 tanks
- 5 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
- 1 BMP-2 with AT-5, carrying anti-aircraft squad of 4 troops with 3 SA-14
- 1 BMP-2 with AT-5, command vehicle

Threat Disposition at 1000 meters (see Figure A-25):

As Blue forces continue to advance, additional Threat defensive positions are acquired and attrition increases. However, the Threat defensive position and location does not shift.

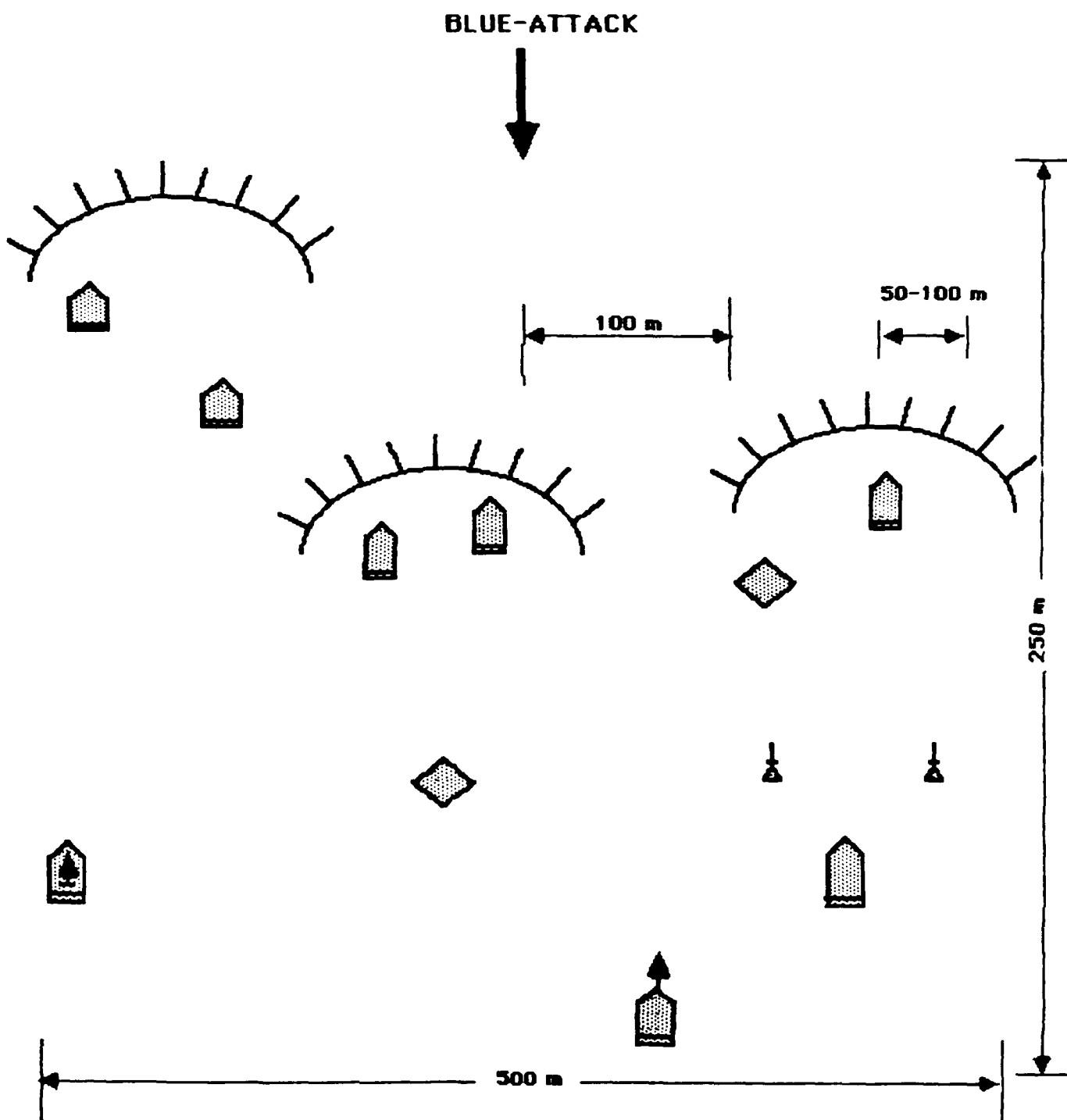


Figure A-25. Red deliberate defense vs. Blue attack (4.2.) (Motorized rifle company (reinforced) deployed in first echelon main defense belt).

Subsequent Scenario Brief 4.3: Red Deliberate Defense vs. Blue Attack

Threat Unit: Motorized Rifle Company (Reinforced) in the First Echelon Main Defense Belt

Range Line: Line 3: 400 meters

Loss Rate: High - 2 systems (8 systems cumulative)

Threat Composition:

- 2 T-80 tanks
- 4 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
- 1 BMP-2 with AT-5, command vehicle

Threat Disposition at 400 meters (see Figure A-26):

Blue forces have closed to within 400 meters and gone into their assault. The Threat unit continues to occupy the strong point awaiting either reinforcements or orders to withdraw.

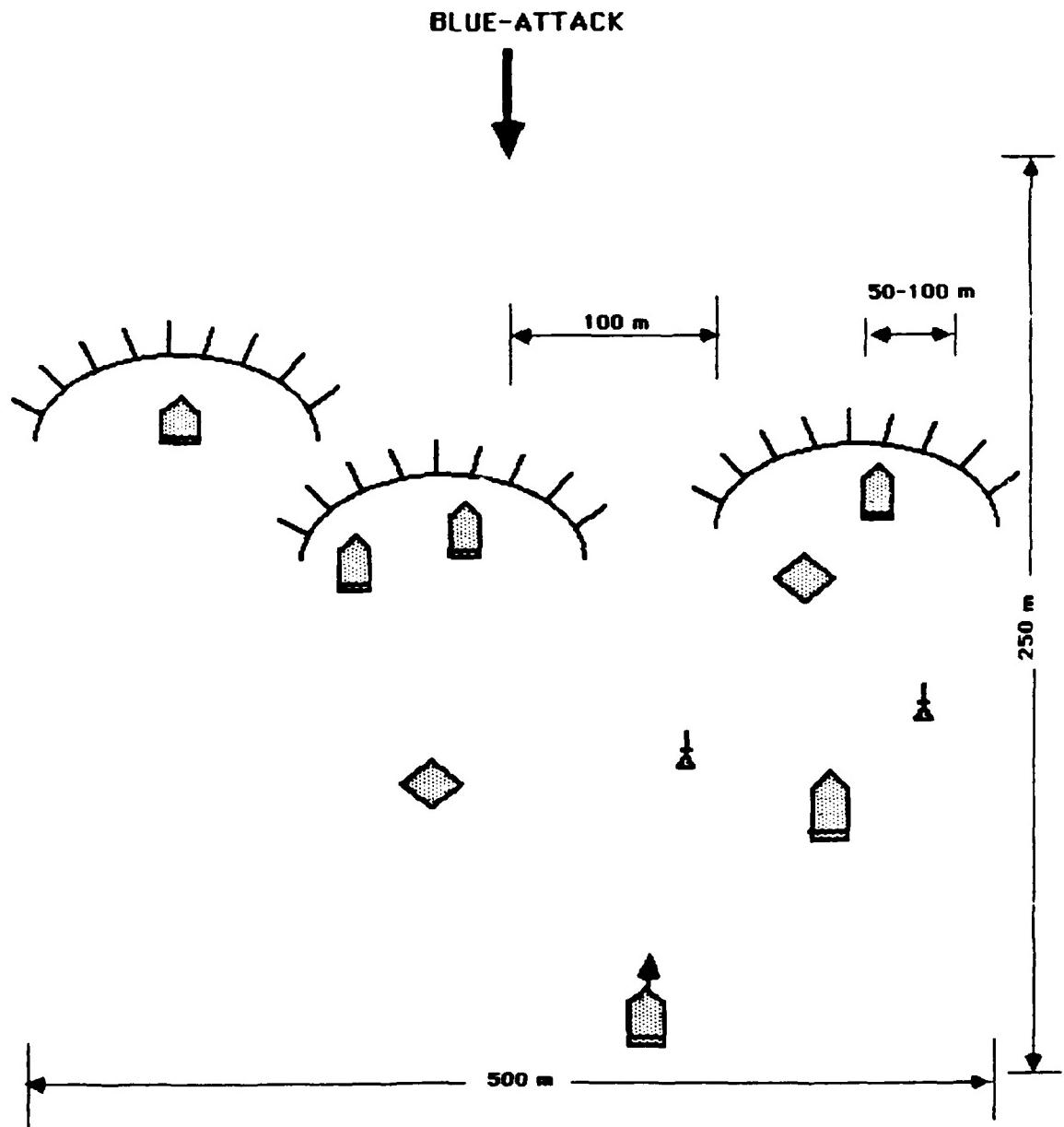


Figure A-26. Red deliberate defense vs. Blue attack (4.3.) (Motorized rifle company (reinforced) deployed in first echelon main defense belt).

Subsequent Scenario Brief 4.4: Red Deliberate Defense vs. Blue Attack

Threat Unit: Motorized Rifle Company (Reinforced) in the First Echelon Main Defense Belt

Range Line: Line 1: 2000 meters

Loss Rate: Low - 1 systems (1 system cumulative)

Threat Composition:

- 4 T-80 tanks
- 9 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
- 1 BMP-2 with AT-5, command vehicle

Threat Disposition at 2000 meters (see Figure A-27):

The company continues to occupy its prepared defensive positions.

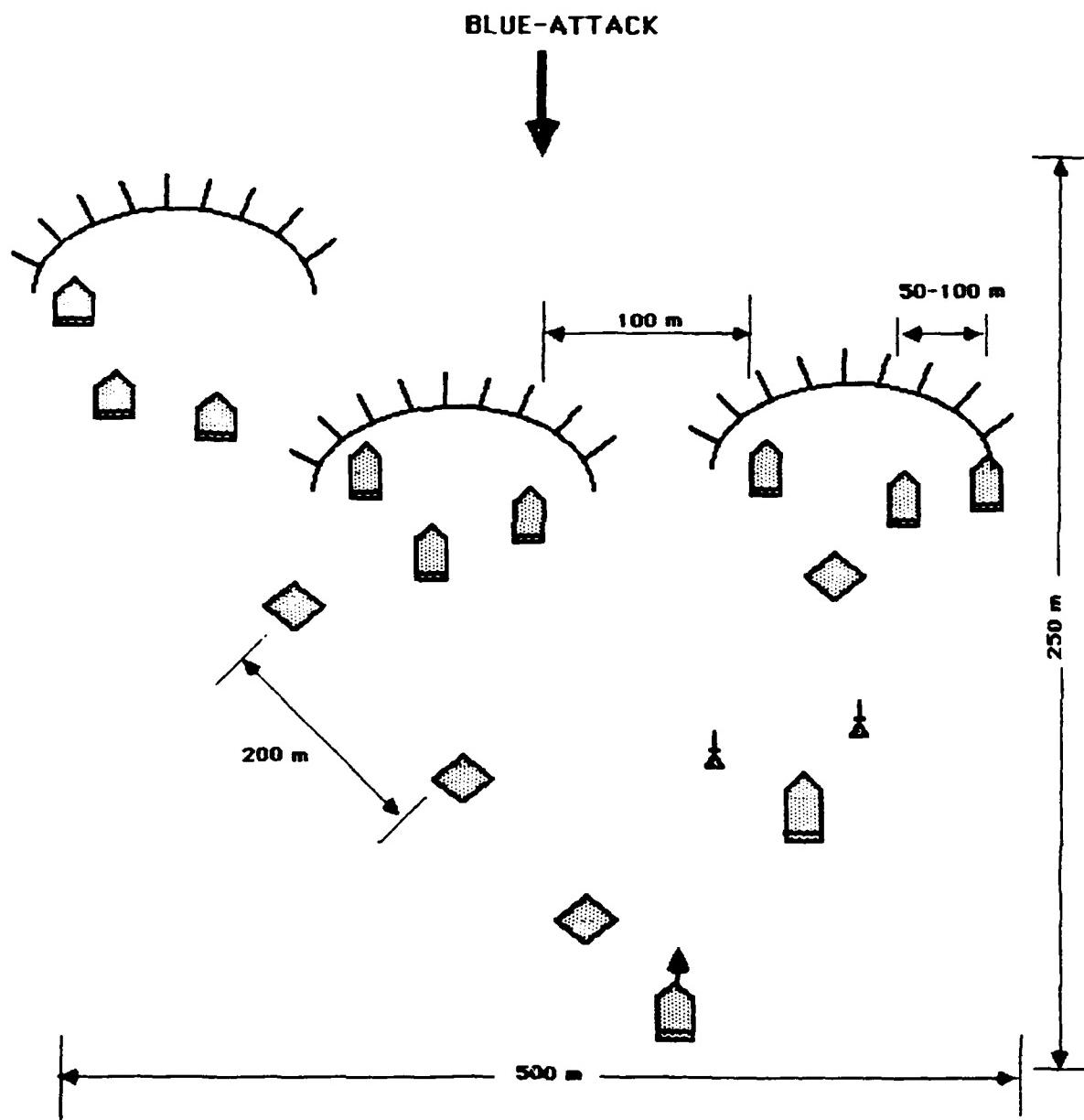


Figure A-27. Red deliberate defense vs. Blue attack (4.4.) (Motorized rifle company (reinforced) deployed in first echelon main defense belt).

Subsequent Scenario Brief 4.5: Red Deliberate Defense vs. Blue Attack

Threat Unit: Motorized Rifle Company (Reinforced) in the First Echelon Main Defense Belt

Range Line: Line 2: 1000 meters

Loss Rate: Low - 1 systems (2 systems cumulative)

Threat Composition:

- 4 T-80 tanks
- 8 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
- 1 BMP-2 with AT-5, command vehicle

Threat Disposition at 1000 meters (see Figure A-28):

The Threat defensive posture, and element locations remain at 500 meters wide by 250 meters deep.

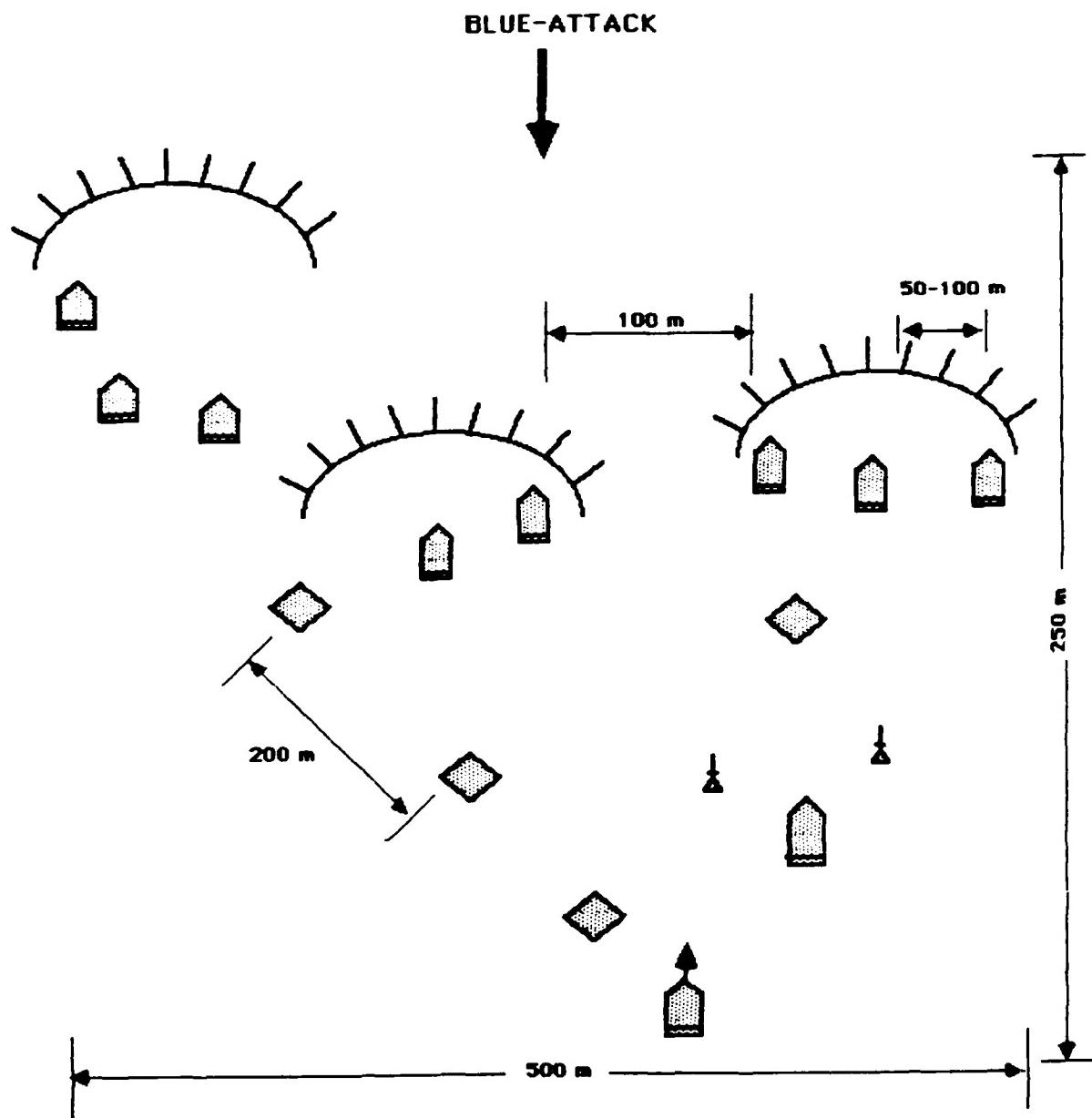


Figure A-28. Red deliberate defense vs. Blue attack (4.5.) (Motorized rifle company (reinforced) deployed in first echelon main defense belt).

Subsequent Scenario Brief 4.6: Red Deliberate Defense vs. Blue Attack

Threat Unit: Motorized Rifle Company (Reinforced) in the First Echelon Main Defense Belt

Range Line: Line 3: 400 meters

Loss Rate: Low - 1 system (3 systems cumulative)

Threat Composition:

- 3 T-80 tanks
- 8 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers
- 1 BMP-2 with AT-5, command vehicle

Threat Disposition at 400 meters (see Figure A-29):

Blue forces have closed to within 400 meters and started their assault. The Threat force remains intact and continues to hold all positions.

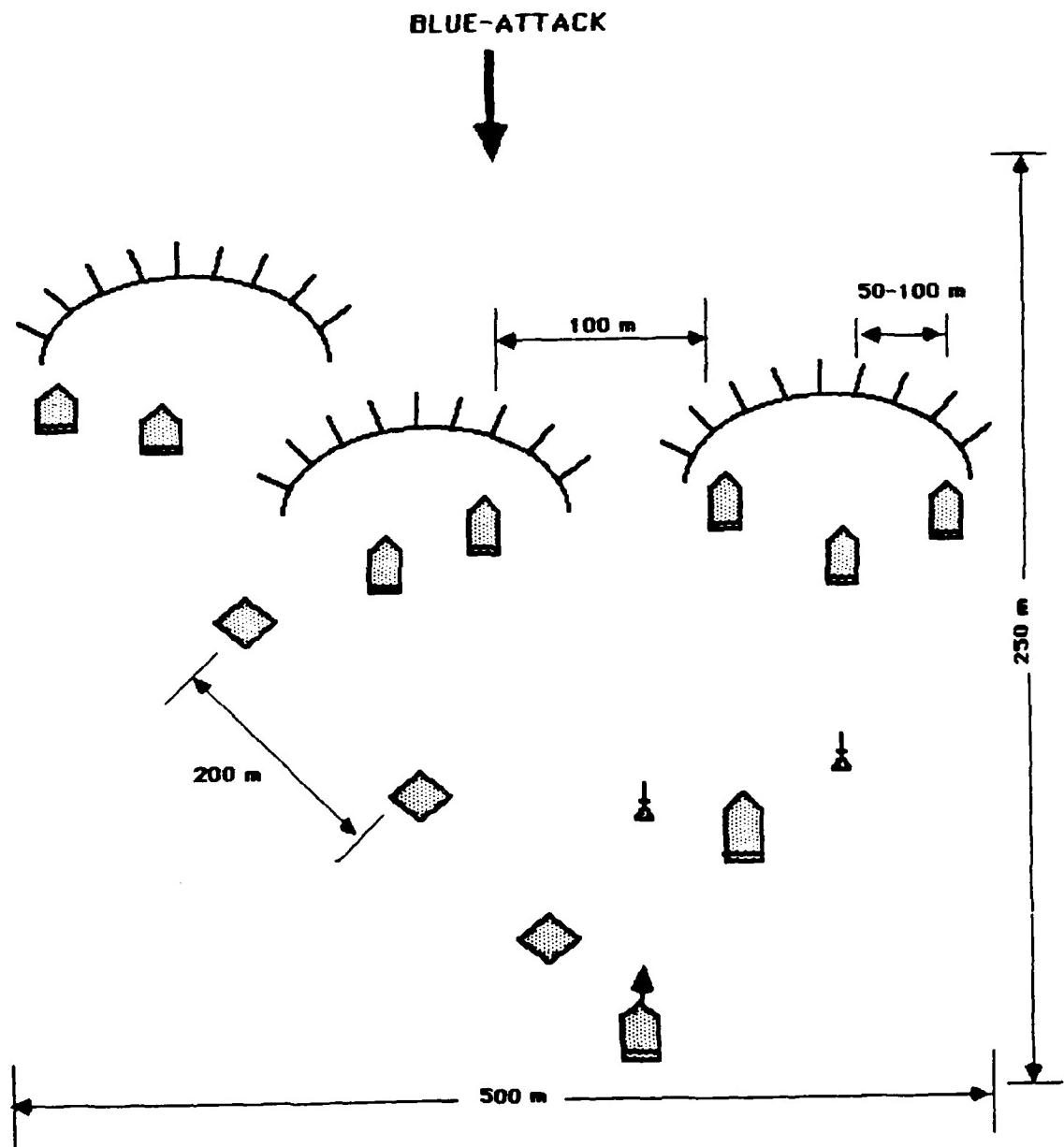


Figure A-29. Red deliberate defense vs. Blue attack (4.6.) (Motorized rifle company (reinforced) deployed in first echelon main defense belt).

Initial Scenario Brief 5.0: Red Withdrawal vs. Blue Attack

Threat Unit: Motorized Rifle Platoon (Reinforced) as the Covering Force as part of the Regimental Withdrawal.

Threat Composition:

- 1 T-80 tank
- 3 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5 carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers

Threat Disposition at Initiation (see Figure A-30):

The platoon is left in a battle position as a covering force to delay advancing forces. The platoon occupies a position 100 meters wide and 50 meters deep. The battle position is 300 meters wide and 250 meters deep.

The Infantry and the AGS are dismounted. All elements occupy prepared positions.

Range Lines:

- Line 0: 3000 meters
- Line 1: 2000 meters
- Line 2: 1000 meters
- Line 3: 400 meters

Encounter Rate:

For > 400 meters, 20 KPH. For < 400 meters, 6 KPH.
Traverse from Line 0 to Line 1 in 3 minutes.
Traverse from Line 1 to Line 2 in 3 minutes.
Traverse from Line 2 to Line 3 in 2 minutes
Traverse from Line 3 to Red position in 4 minutes.

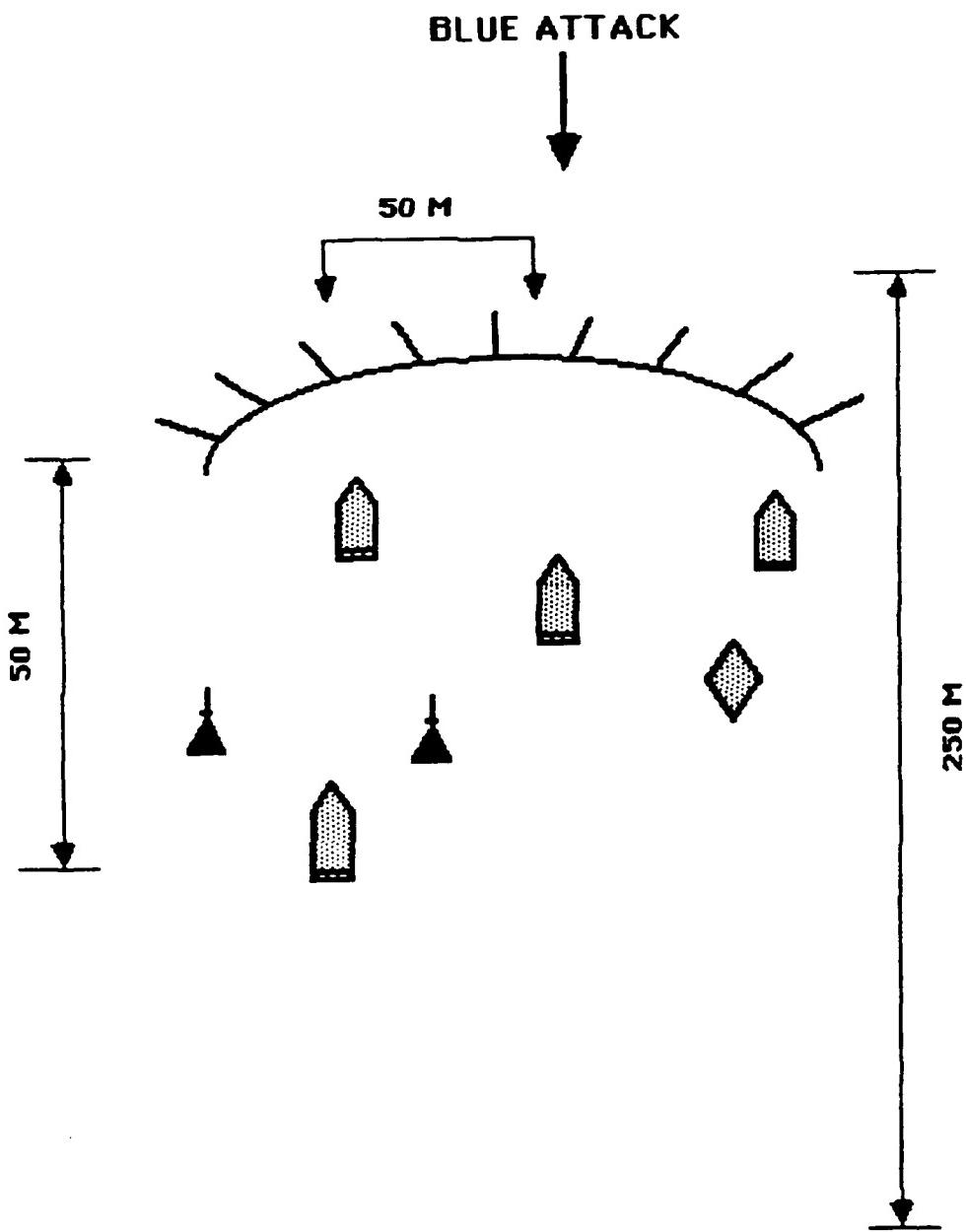


Figure A-30. Red withdrawal vs. Blue attack (5.0.) (Motorized rifle platoon (reinforced) as a covering force as part of the regimental withdrawal.

Subsequent Scenario Brief 5.1: Red Withdrawal vs. Blue Attack

Threat Unit: Motorized Rifle Platoon (Reinforced) as the Covering Force as part of the Regimental Withdrawal

Range Line: Line 1: 2000 meters

Loss Rate: High - 1 system (1 system cumulative)

Threat Composition:

- 1 T-80 tank
- 2 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers

Threat Disposition at 2000 meters (see Figure A-31):

As the Blue advances, the Threat platoon continues to occupy its positions without changes.

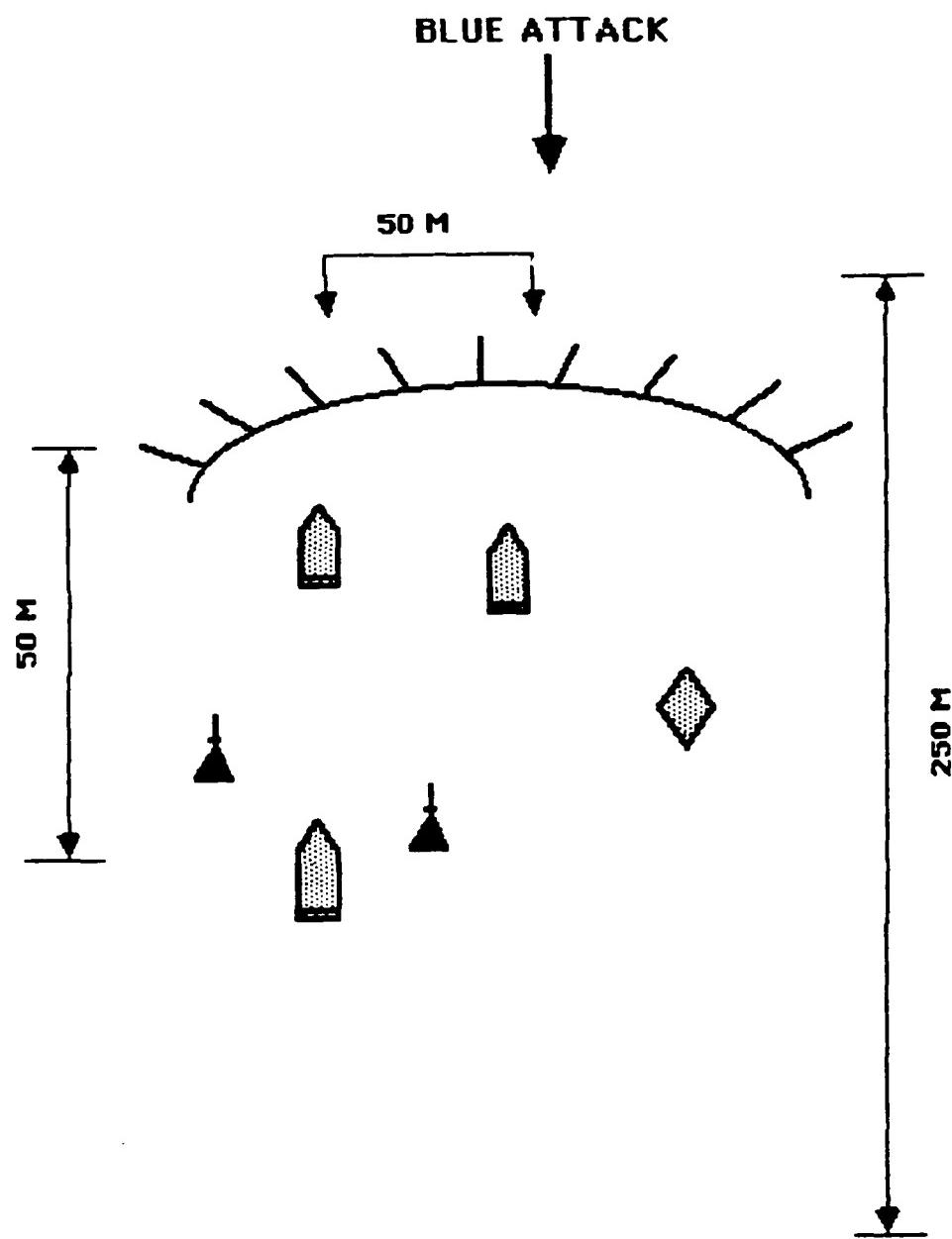


Figure A-31. Red withdrawal vs. Blue attack (5.1.) (Motorized rifle platoon (reinforced) as a covering force as part of the regimental withdrawal.

Subsequent Scenario Brief 5.2: Red Withdrawal vs. Blue Attack

Threat Unit: Motorized Rifle Platoon (Reinforced) as the Covering Force as part of the Regimental Withdrawal

Range Line: Line 2: 1000 meters

Loss Rate: High - 1 system (2 systems cumulative)

Threat Composition: 1 T-80 tank
1 BMP-2 Armored Infantry combat vehicle with AT-5,
30mm automatic gun, carrying rifle squads of
7 troops and one RPG-14 each
1 BMP-2 with AT-5, carrying weapons squad of 7 troops
with 2 AGS-17 automatic grenade launchers

Threat Disposition at 1000 meters (see Figure A-32):

Threat elements continue to occupy prepared positions as Blue advances.

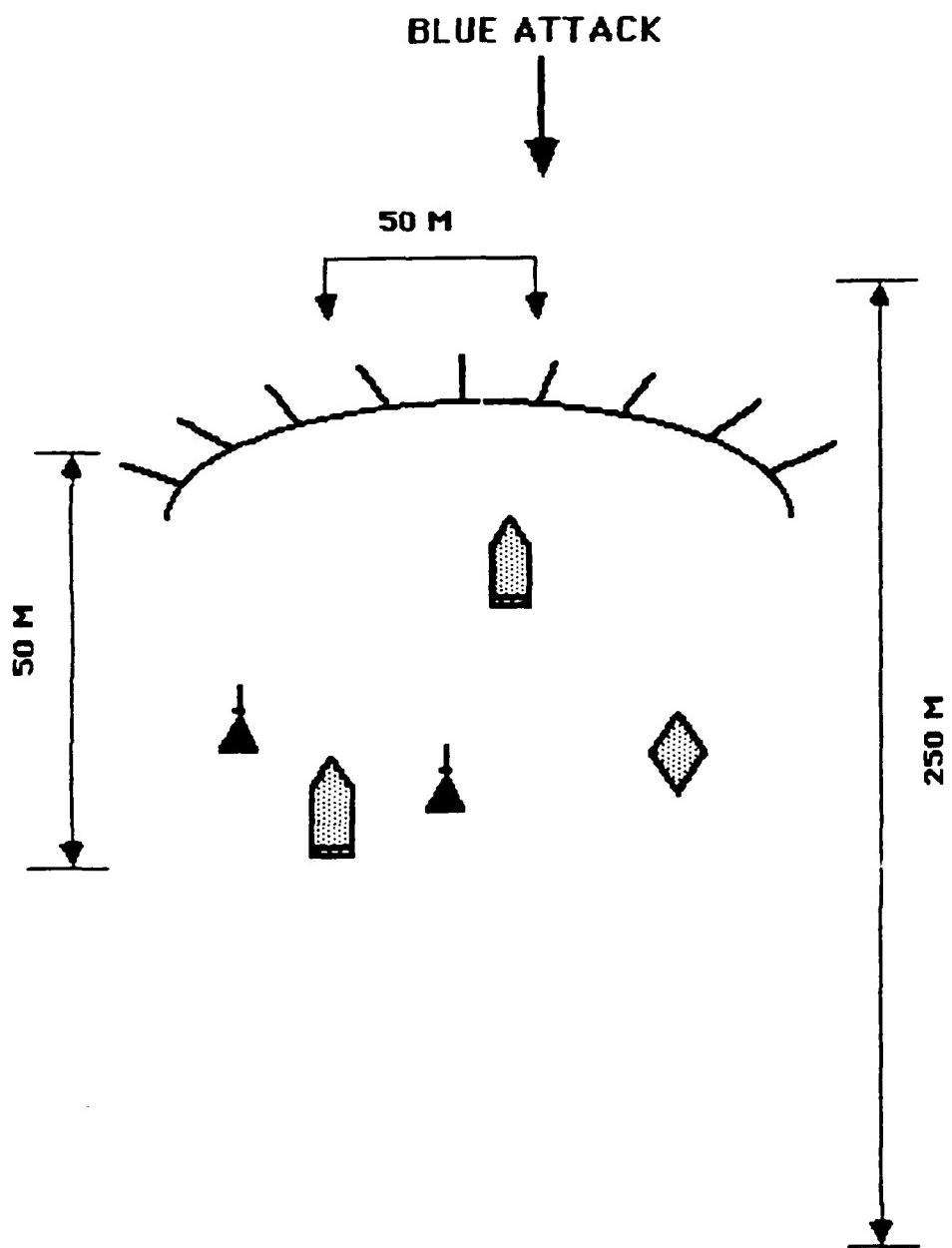


Figure A-32. Red withdrawal vs. Blue attack (5.2.) (Motorized rifle platoon (reinforced) as a covering force as part of the regimental withdrawal.

Subsequent Scenario Brief 5.3: Red Withdrawal vs. Blue Attack

Threat Unit: Motorized Rifle Platoon (Reinforced) as the Covering Force as part of the Regimental Withdrawal

Range Line: Line 3: 400 meters

Loss Rate: High - 1 system (3 systems cumulative)

Threat Composition: 1 T-80 tank
1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers

Threat Disposition at 400 meters (see Figure A-33):

The Threat platoon continues to occupy the battle position strong point. As losses accumulate, the threat covering force prepares to withdraw on order and begins to withdraw to a subsequent position.

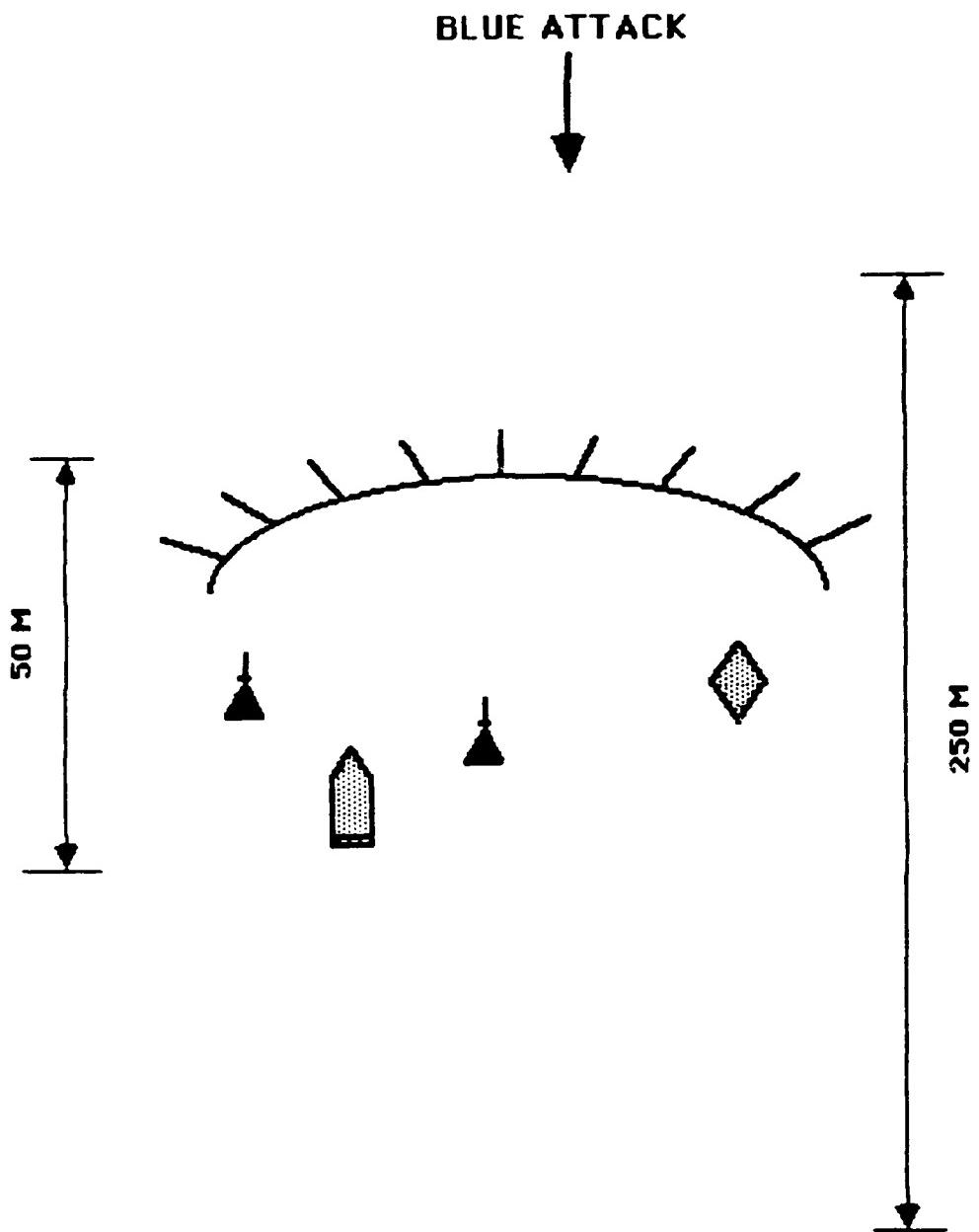
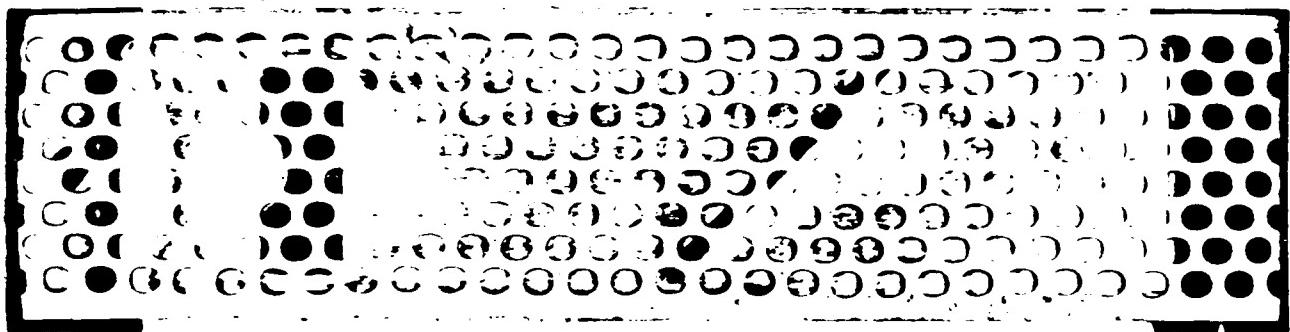


Figure A-33. Red withdrawal vs. Blue attack (5.3.) (Motorized rifle platoon (reinforced) as a covering force as part of the regimental withdrawal.



Subsequent Scenario Brief 5.4: Red Withdrawal vs. Blue Attack

Threat Unit: Motorized Rifle Platoon (Reinforced) as the Covering Force as part of the Regimental Withdrawal

Range Line: Line 1: 2000 meters

Loss Rate: Low - 0 systems (0 systems cumulative)

Threat Composition: 1 T-80 tank
3 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers

Threat Disposition at 2000 meters (see Figure A-34):

As the Blue advances, the Threat platoon continues to occupy the position without change.

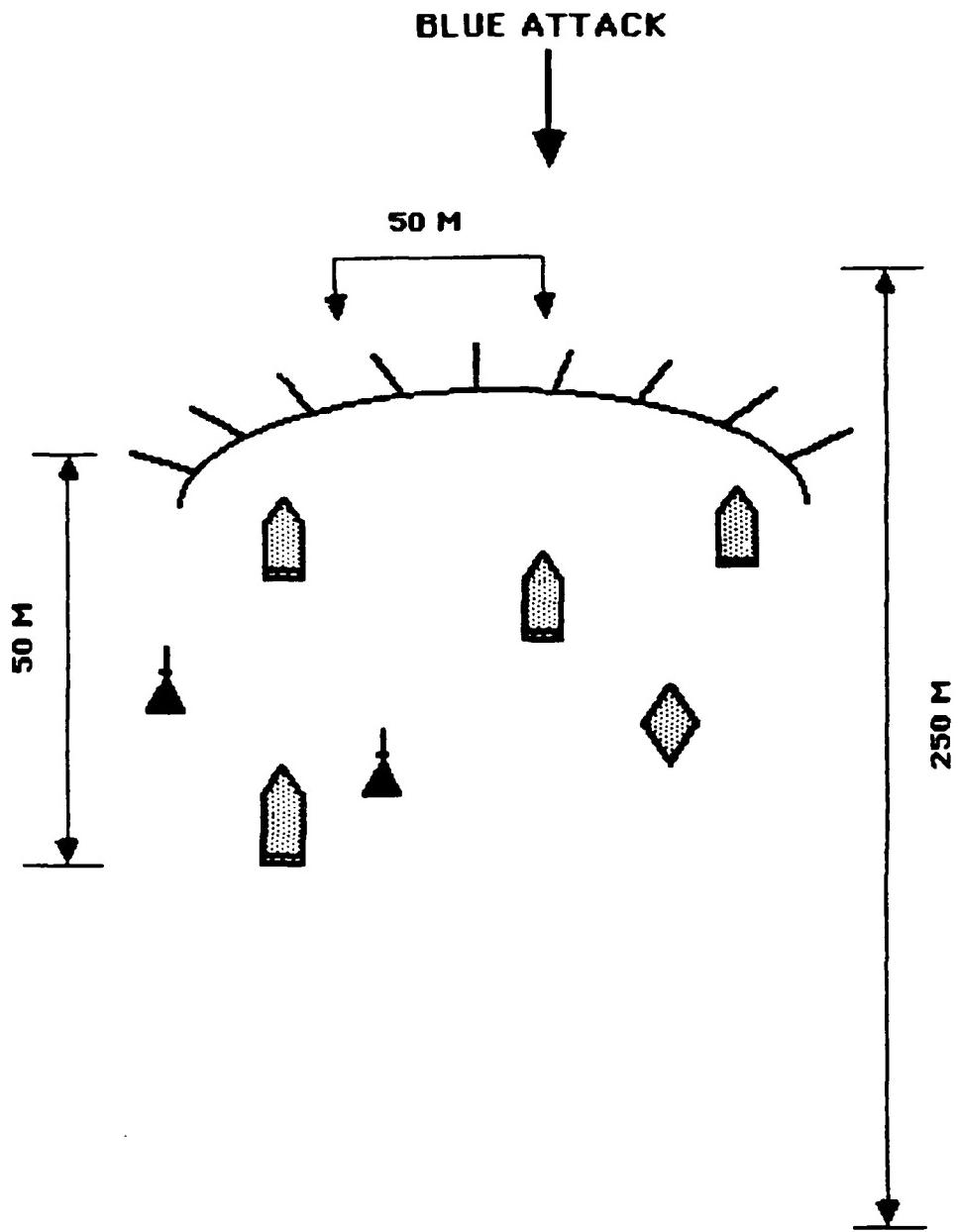


Figure A-34. Red withdrawal vs. Blue attack (5.4.) (Motorized rifle platoon (reinforced) as a covering force as part of the regimental withdrawal.

Subsequent Scenario Brief 5.5: Red Withdrawal vs. Blue Attack

Threat Unit: Motorized Rifle Platoon (Reinforced) as the Covering Force as part of the Regimental Withdrawal

Range Line: Line 2: 1000 meters

Loss Rate: Low - 0 systems (0 systems cumulative)

Threat Composition:

- 1 T-80 tank
- 3 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BMP-2 with AT-5, carrying weapons squad of 7 troops with 2 AGS-17 automatic grenade launchers

Threat Disposition at 1000 meters (see Figure A-35):

Threat elements continue to occupy prepared positions as Blue advances.

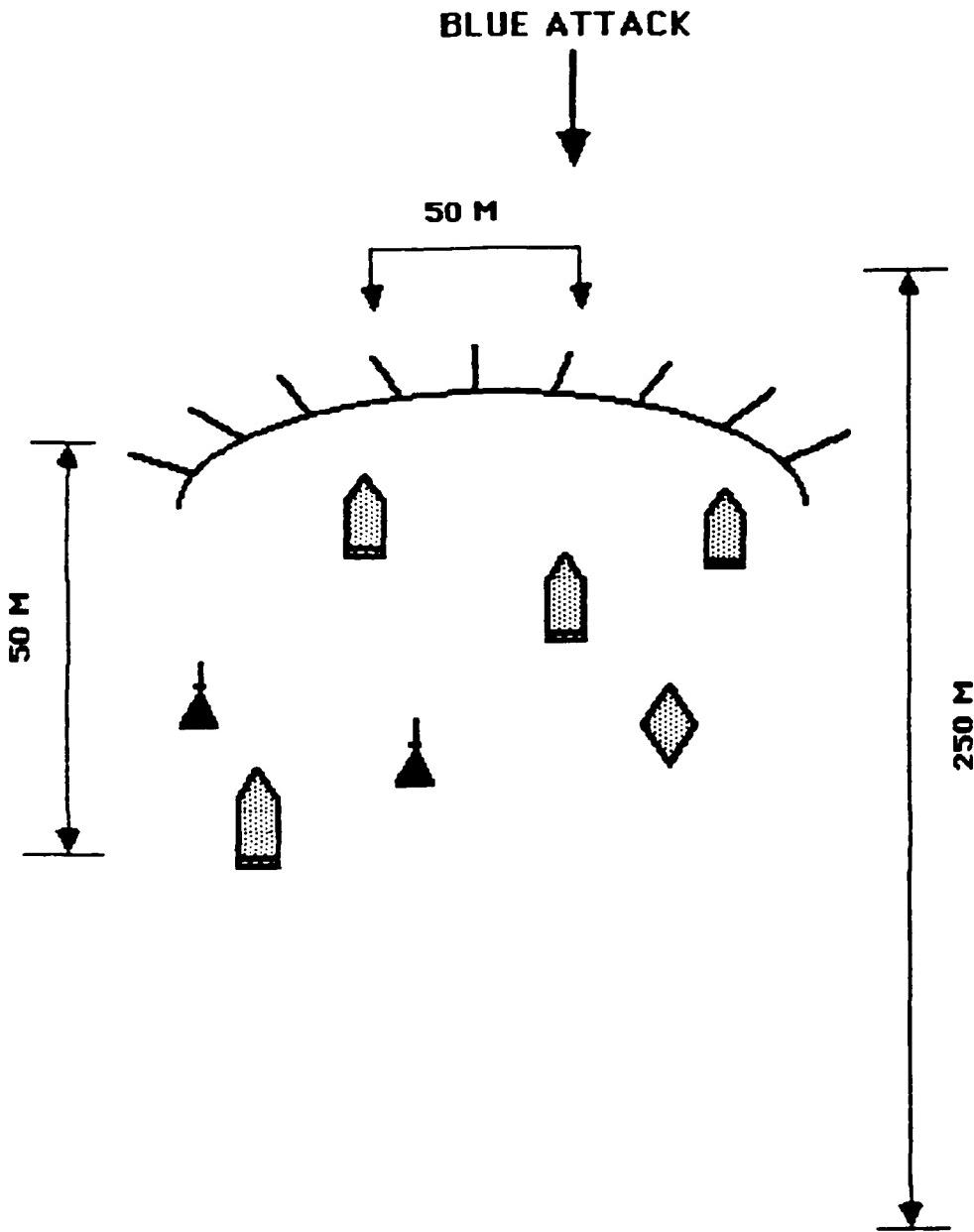


Figure A-35. Red withdrawal vs. Blue attack (5.5.) (Motorized rifle platoon (reinforced) as a covering force as part of the regimental withdrawal.

Subsequent Scenario Brief 5.6: Red Withdrawal vs. Blue Attack

Threat Unit: Motorized Rifle Platoon (Reinforced) as the Covering Force as part of the Regimental Withdrawal

Range Line: Line 3: 400 meters

Loss Rate: Low - 1 system (1 system cumulative)

Threat Composition: 1 T-80 tank
2 BMP-2 Armored Infantry combat vehicles with AT-5,
30mm automatic gun, carrying rifle squads of
7 troops and one RPG-14 each
1 BMP-2 with AT-5, carrying weapons squad of 7 troops
with 2 AGS-17 automatic grenade launchers

Threat Disposition at 400 meters (see Figure A-36):

The threat forces continue to defend the battle position. As Blue continues the assault, they will withdraw to a subsequent position.

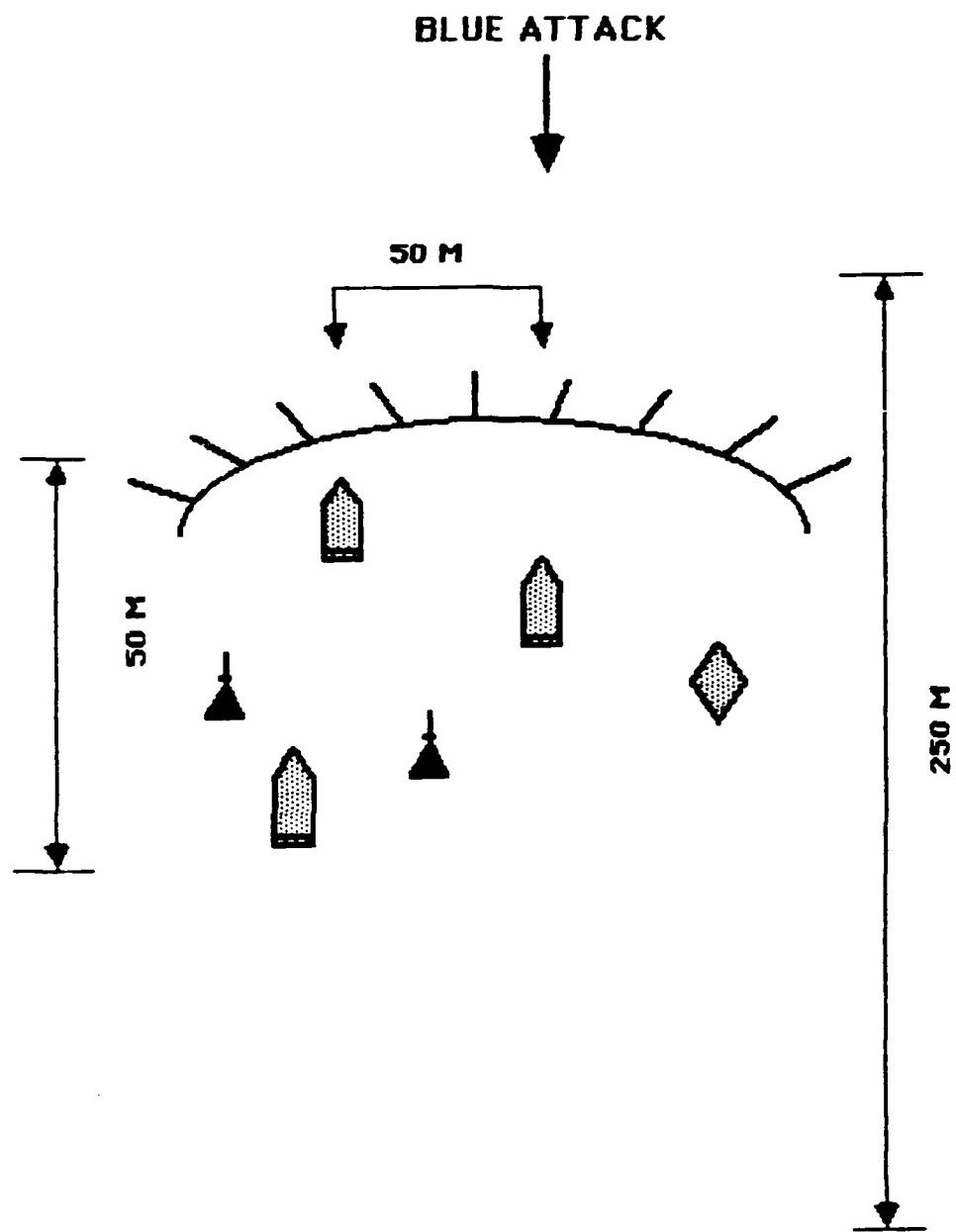


Figure A-36. Red withdrawal vs. Blue attack (5.6.) (Motorized rifle platoon (reinforced) as a covering force as part of the regimental withdrawal.

Initial Scenario Brief 6.0: Red Breakthrough vs. Blue Defense

Threat Unit: A tank company reinforced with a Motorized Infantry Platoon and an Engineer Squad. They are attacking as the Second Echelon of a First Echelon Motorized Rifle Regiment in the Main Attack

Threat Composition:

- 10 T-80 tanks
- 3 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BTR-50PK mine clearer with 3 crewmen, 1 heavy machine gun and a mine roller
- 1 IMR-2 armored engineer tractor and 3 crewmen, a crane, bucket loader, and dozer blade

Threat Disposition at Initiation (see Figure A-37):

The 2nd Echelon Tank Company (Reinforced) exploits a gap in the Blue defense. The tank company breaks through the Blue defense while 1st Echelon Red forces continue to press Blue strong points. 2nd Echelon Red forces advance in a wedge formation through a gap 500 meters wide. The attack formation is 500 meters wide, 250 meters deep, with 150 meters between columns and 50 meters interval between vehicles.

Range Lines:

- Line 0: FEBA
- Line 1: 400 meters
- Line 2: 1000 meters
- Line 3: 2000 meters

Encounter Rate:

For all range lines, 6 KPH.
Penetrate FEBA to 400 meters in 4 minutes.
Penetrate Line 1 to Line 2 in 6 minutes.
Penetrate Line 2 to Line 3 in 10 minutes.

Loss Rate:

For high, 50% from 400m to 2000m. For low, 20% from 400m to 2000m.

	High	Low
Line 1:	2 systems gone (2 total)	0 systems gone (0 total)
Line 2:	2 systems gone (4 total)	1 system gone (1 total)
Line 3:	4 systems gone (8 total)	2 systems gone (3 total)

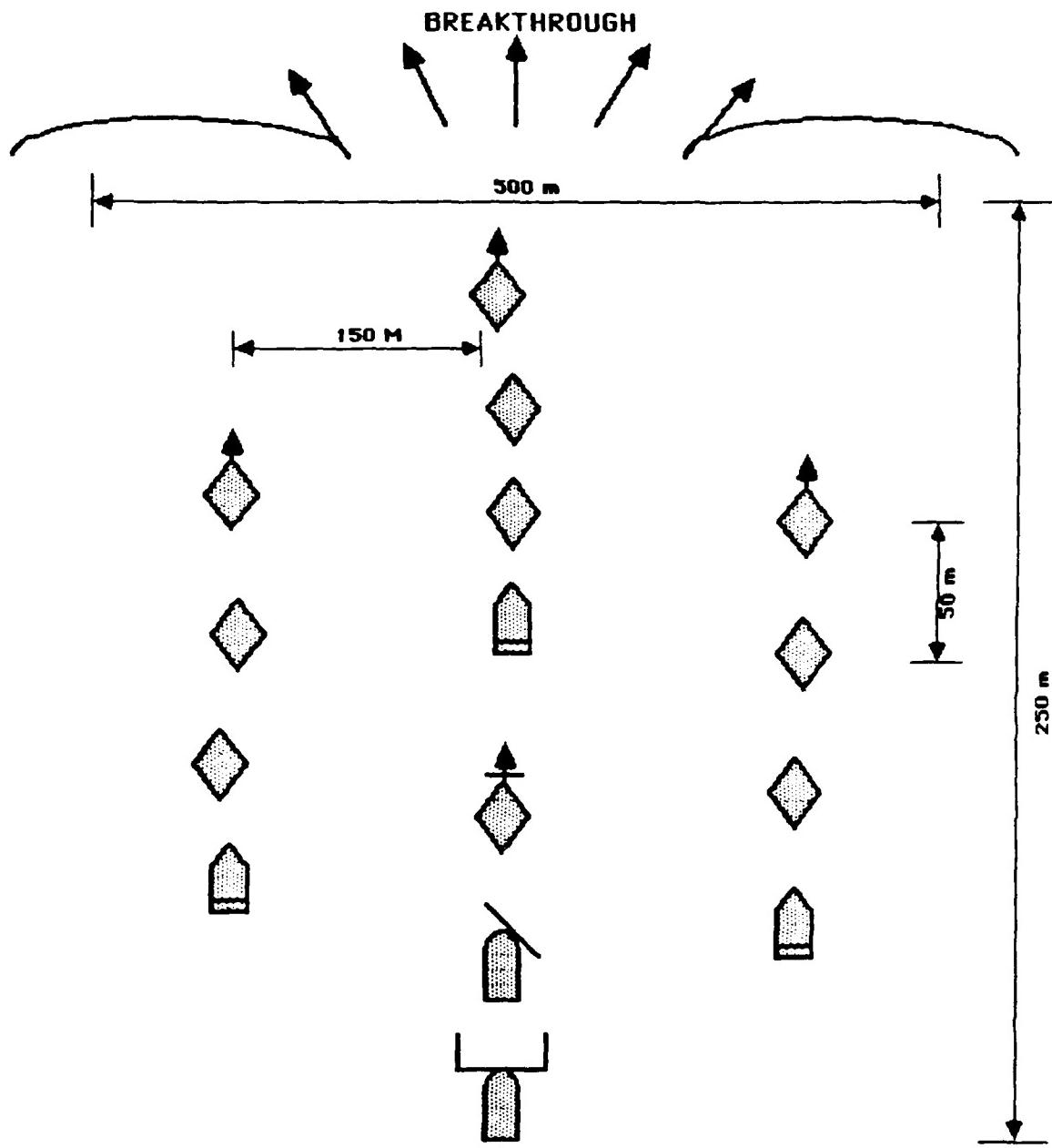


Figure A-37. Threat breakthrough vs. Blue defense (6.0.) (Motorized tank company (reinforced) attacking as 2nd echelon of 1st echelon MRR as part of main attack and breakthrough.

Subsequent Scenario Brief 6.1: Red Breakthrough vs. Blue Defense

Threat Unit: Tank Company Reinforced with a Motorized Rifle Platoon and an Engineer Squad

Range Line: Line 1: 400 meters penetration

Loss Rate: High - 2 systems (2 systems cumulative)

Threat Composition:

- 9 T-80 tanks
- 2 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BTR-50PK mine clearer with 3 crewmen, 1 heavy machine gun and a mine roller
- 1 IMR-2 Armored engineer tractor and 3 crewmen, a crane, bucket loader, and dozer blade

Threat Disposition at 400 meters (see Figure A-38):

The attacking tank company penetrates the Blue defense 400 meters. Each tank platoon exploits the gap by attacking Blue positions from the front and flanks. Each platoon maintains a formation 100 meters wide by 100 meters deep. The infantry squads remain mounted and the engineer equipment begins to move up to remove Blue obstacles.

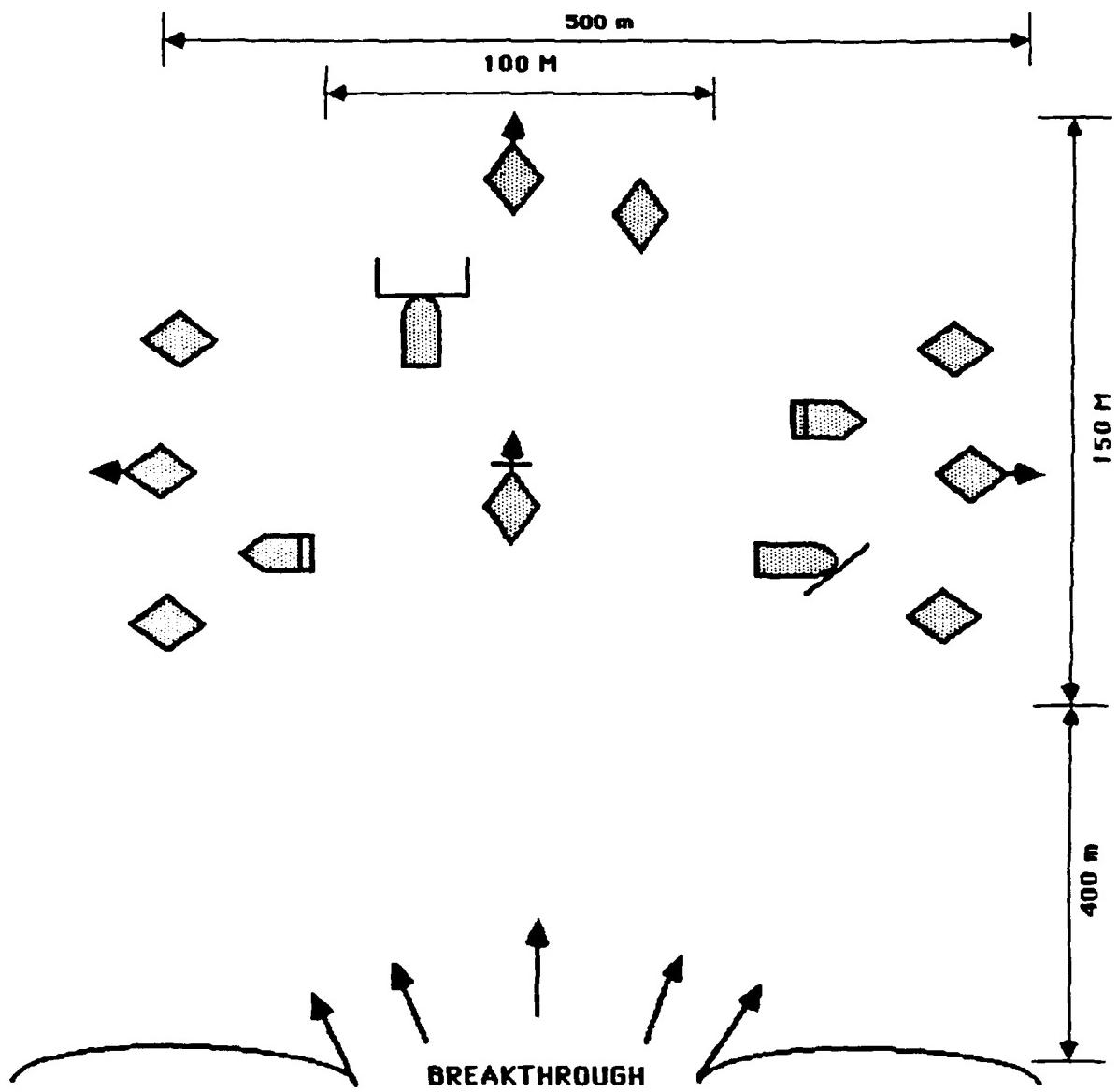


Figure A-38. Threat breakthrough vs. Blue defense (6.1.) (Motorized tank company (reinforced) attacking as 2nd echelon of 1st echelon MRR as part of main attack and breakthrough.

Subsequent Scenario Brief 6.2: Red Breakthrough vs. Blue Defense

Threat Unit: Tank Company Reinforced with a Motorized Rifle Platoon and an Engineer Squad

Range Line: Line 2: 1000 meters penetration

Loss Rate: High - 2 systems (4 systems cumulative)

Threat Composition:

- 7 T-80 tanks
- 2 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BTR-50PK mine clearer with 3 crewmen, 1 heavy machine gun and a mine roller
- 1 IMR-2 Armored engineer tractor and 3 crewmen, a crane, bucket loader, and dozer blade

Threat Disposition at 1000 meters (see Figure A-39):

The tank company continues to attack on three different platoon axes. The infantry squads have dismounted and support the attack from the ground using their RPGs and squad weapons. The engineer equipment is on line with the platoons and begins to remove Blue defensive obstacles. Platoon formations close to 75 meter widths and 50 meter depths. The Red formation has penetrated 1000 meters into Blue defensive positions.

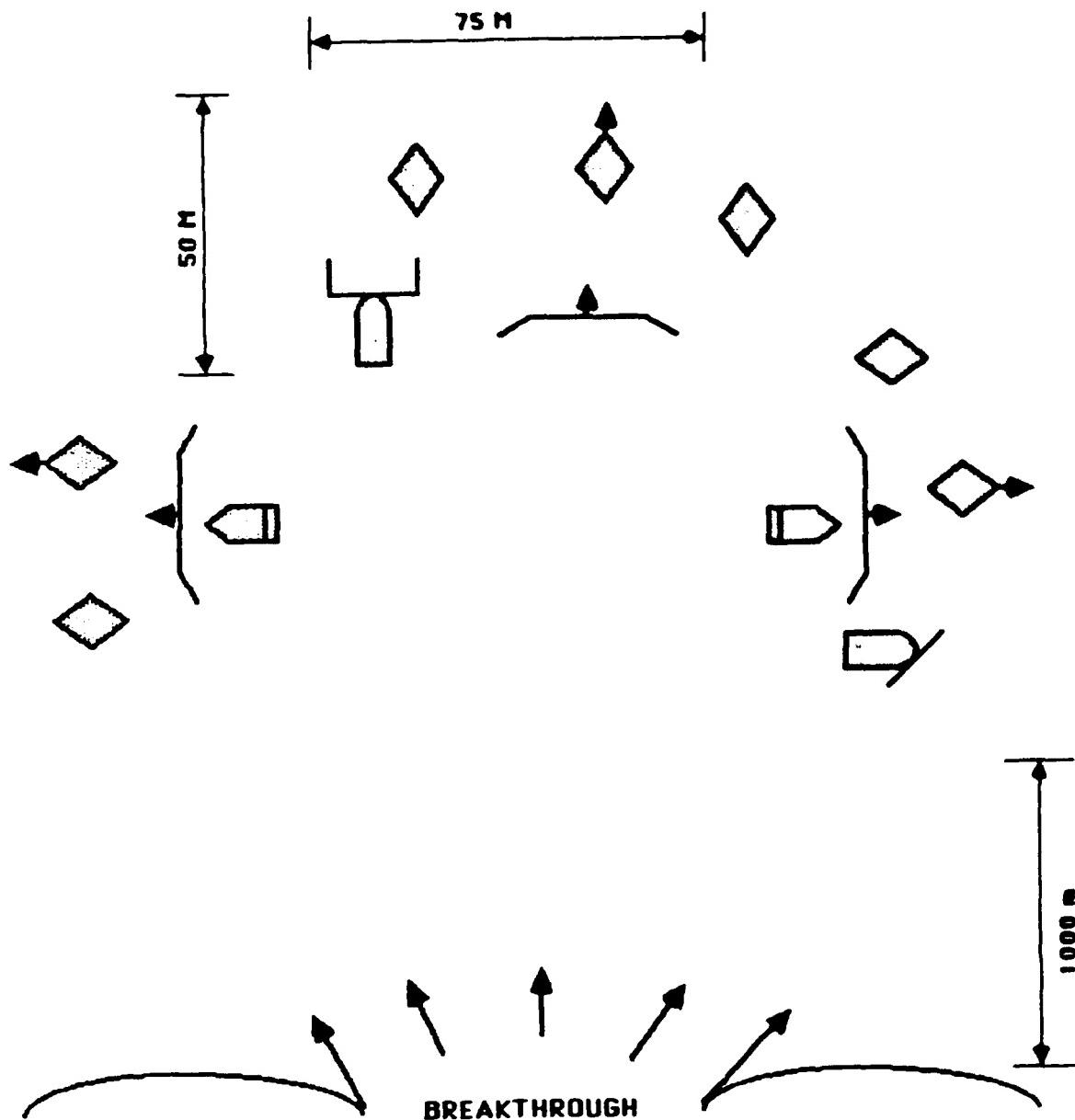


Figure A-39. Threat breakthrough vs. Blue defense (6.2.) (Motorized tank company (reinforced) attacking as 2nd echelon of 1st echelon MRR as part of main attack and breakthrough.

Subsequent Scenario Brief 6.3: Red Breakthrough vs. Blue Defense

Threat Unit: **Tank Company Reinforced with a Motorized Rifle Platoon and an Engineer Squad**

Range Line: **Line 3: 2000 meters penetration**

Loss Rate: **High - 4 systems (8 systems cumulative)**

Threat Composition: **3 T-80 tanks
2 BMP-2 Armored Infantry combat vehicles with AT-5,
30mm automatic gun, carrying rifle squads of
7 troops and one RPG-14 each
1 BTR-50PK mine clearer with 3 crewmen, 1 heavy
machine gun and a mine roller
1 IMR-2 Armored engineer tractor and 3 crewmen,
a crane, bucket loader, and dozer blade**

Threat Disposition at 2000 meters (see Figure A-40):

The tank company continues to attack Blue defensive positions from the flanks and rear. Platoon formations have closed to 50 meter fronts and 75 meter depths due to attrition. Engineer equipment leads and removes Blue defensive barriers, followed by the tanks and dismounted infantry squads.

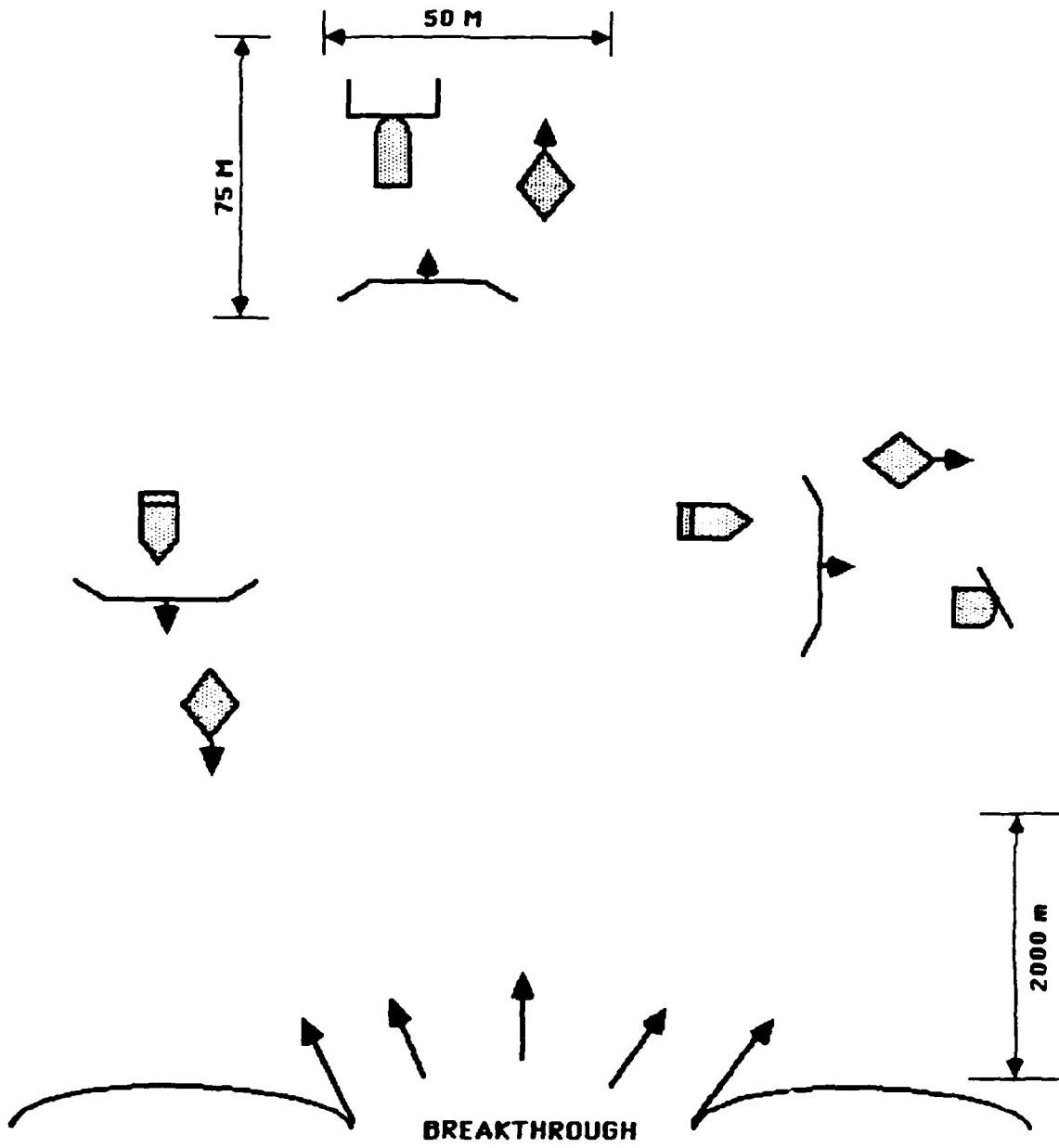


Figure A-40. Threat breakthrough vs. Blue defense (6.3.) (Motorized tank company (reinforced) attacking as 2nd echelon of 1st echelon MRR as part of main attack and breakthrough.

Subsequent Scenario Brief 6.4: Red Breakthrough vs. Blue Defense

Threat Unit: Tank Company Reinforced with a Motorized Rifle Platoon and an Engineer Squad

Range Line: Line 1: 400 meters penetration

Loss Rate: Low - 0 systems (0 systems cumulative)

Threat Composition:

- 10 T-80 tanks
- 3 BMP-2 Armored Infantry Combat Vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BTR-50PK mine clearer with 3 crewmen, 1 heavy machine gun and a mine roller
- 1 IMR-2 Armored engineer tractor and 3 crewmen, a crane, bucket loader, and dozer blade

Threat Disposition at 400 meters (see Figure A-41):

The attacking tank company penetrates the Blue defense 400 meters. Each tank platoon exploits the gap by attacking Blue positions from the front and flanks. Each platoon maintains a formation 100 meters wide by 100 meters deep. The infantry squads remain mounted and the engineer equipment begins to move up to remove Blue obstacles.

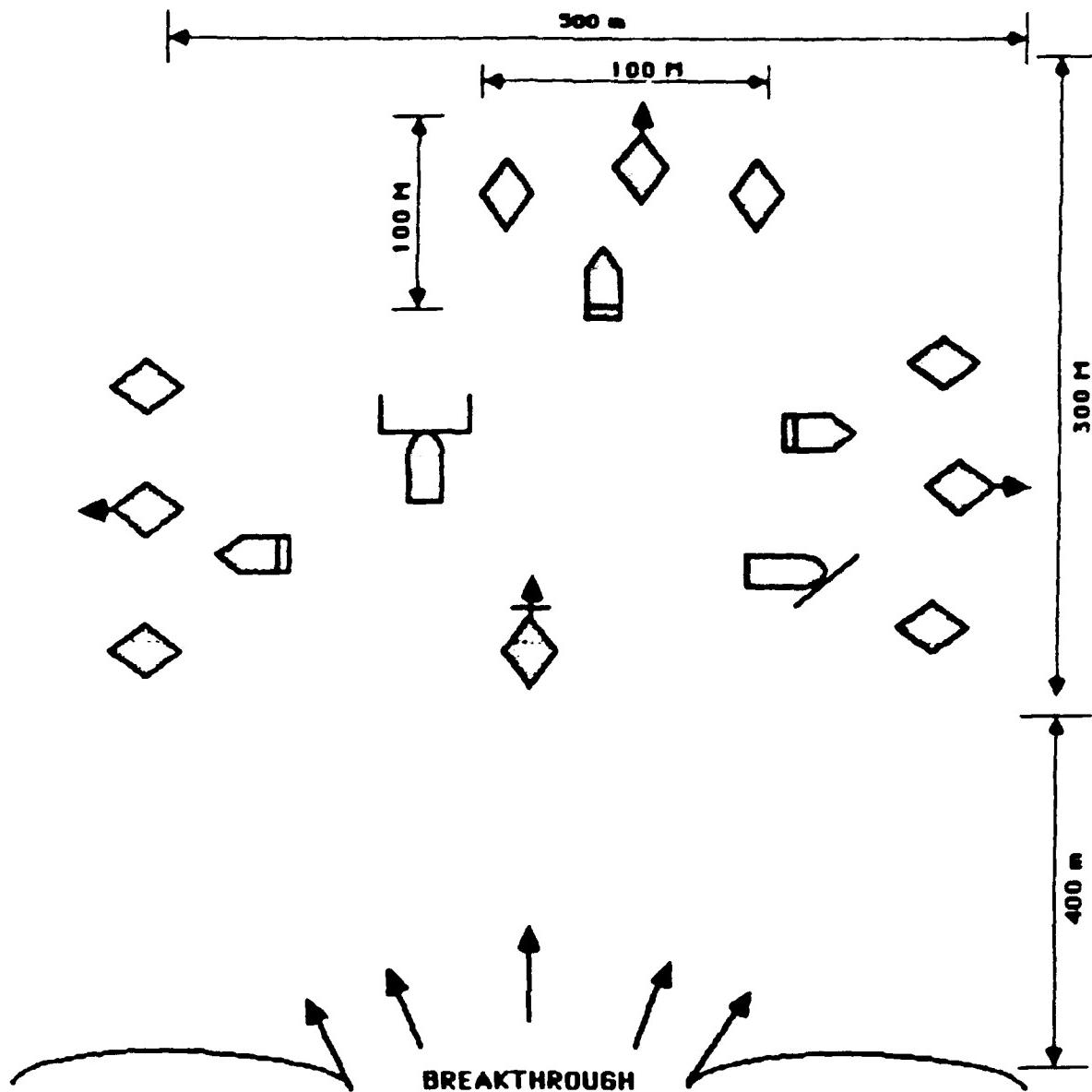


Figure A-41. Threat breakthrough vs. Blue defense (6.4.) (Motorized tank company (reinforced) attacking as 2nd echelon of 1st echelon MRR as part of main attack and breakthrough.

Subsequent Scenario Brief 6.5: Red Breakthrough vs. Blue Defense

Threat Unit: Tank Company Reinforced with a Motorized Rifle Platoon and an Engineer Squad

Range Line: Line 2: 1000 meters penetration

Loss Rate: Low - 1 system (1 system cumulative)

Threat Composition:

- 9 T-80 tanks
- 3 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
- 1 BTR-50PK mine clearer with 3 crewmen, 1 heavy machine gun and a mine roller
- 1 IMR-2 Armored engineer tractor and 3 crewmen, a crane, bucket loader, and dozer blade

Threat Disposition at 1000 meters (see Figure A-42):

The tank company continues to attack on three different platoon axis. The infantry squads remain mounted and support the attack from the BMP-2 using squad weapons. The engineer equipment is on line with the platoons and begins to remove Blue defensive obstacles. Platoon formations close to 75 meter widths and 75 meter depths. The Red formation has penetrated 1000 meters into Blue defensive positions.

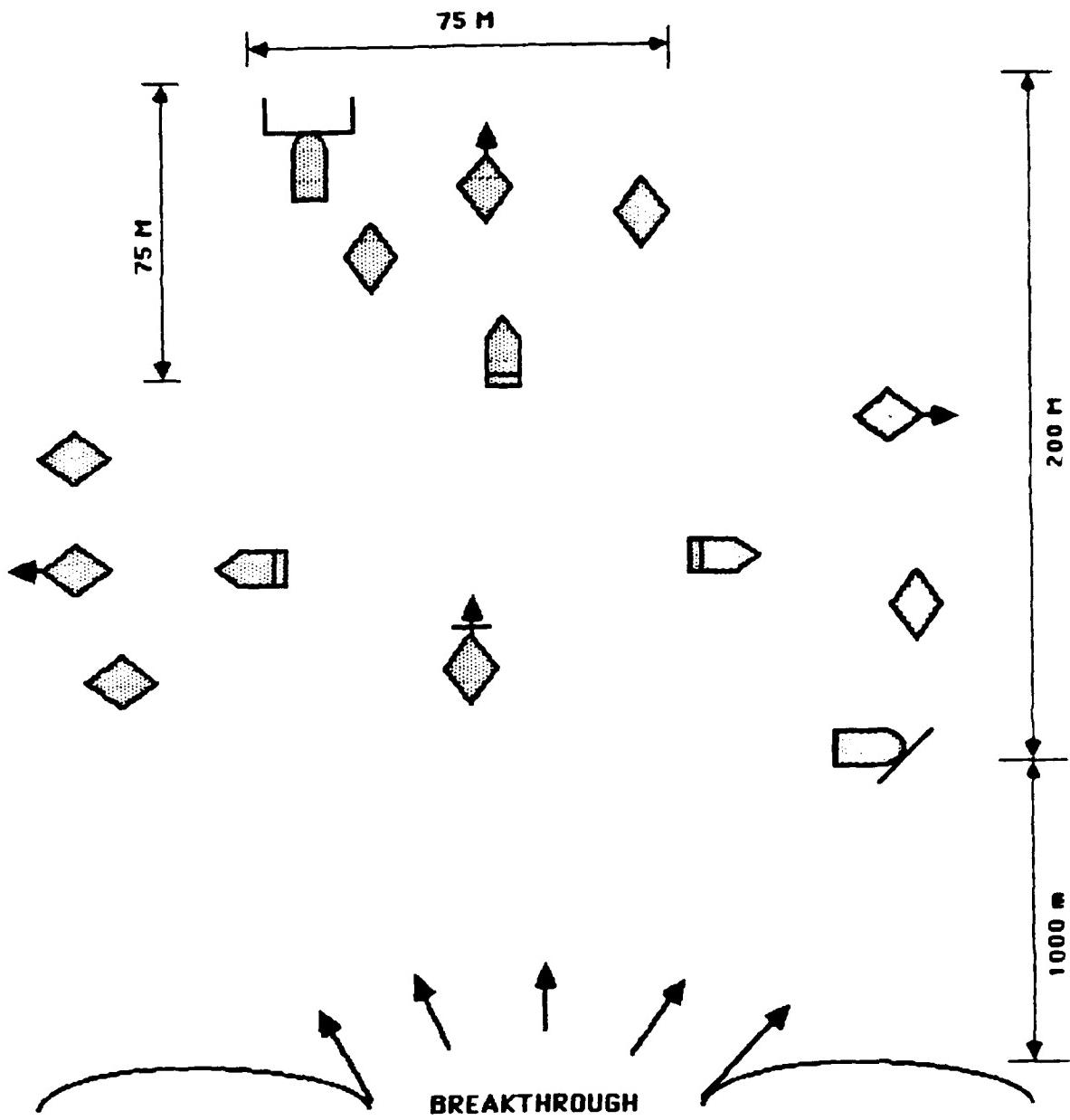


Figure A-42. Threat breakthrough vs. Blue defense (6.5.) (Motorized tank company (reinforced) attacking as 2nd echelon of 1st echelon MRR as part of main attack and breakthrough.

Subsequent Scenario Brief 6.6: Red Breakthrough vs. Blue Defense

Threat Unit: Tank Company Reinforced with a Motorized Rifle Platoon and an Engineer Squad

Range Line: Line 3: 2000 meters penetration

Loss Rate: Low - 2 systems (3 systems cumulative)

Threat Composition: 8 T-80 tanks
2 BMP-2 Armored Infantry combat vehicles with AT-5, 30mm automatic gun, carrying rifle squads of 7 troops and one RPG-14 each
1 BTR-50PK mine clearer with 3 crewmen, 1 heavy machine gun and a mine roller
1 IMR-2 Armored engineer tractor and 3 crewmen, a crane, bucket loader, and dozer blade

Threat Disposition at 2000 meters (see Figure A-43):

The tank company continues to attack Blue defensive positions from the flanks and rear. Platoon formations remain at 75 meter fronts and 75 meter depths. Engineer equipment leads and removes Blue defensive barriers, followed by the tanks and the infantry squads. The infantry remains mounted, supporting the attack from their BMPs.

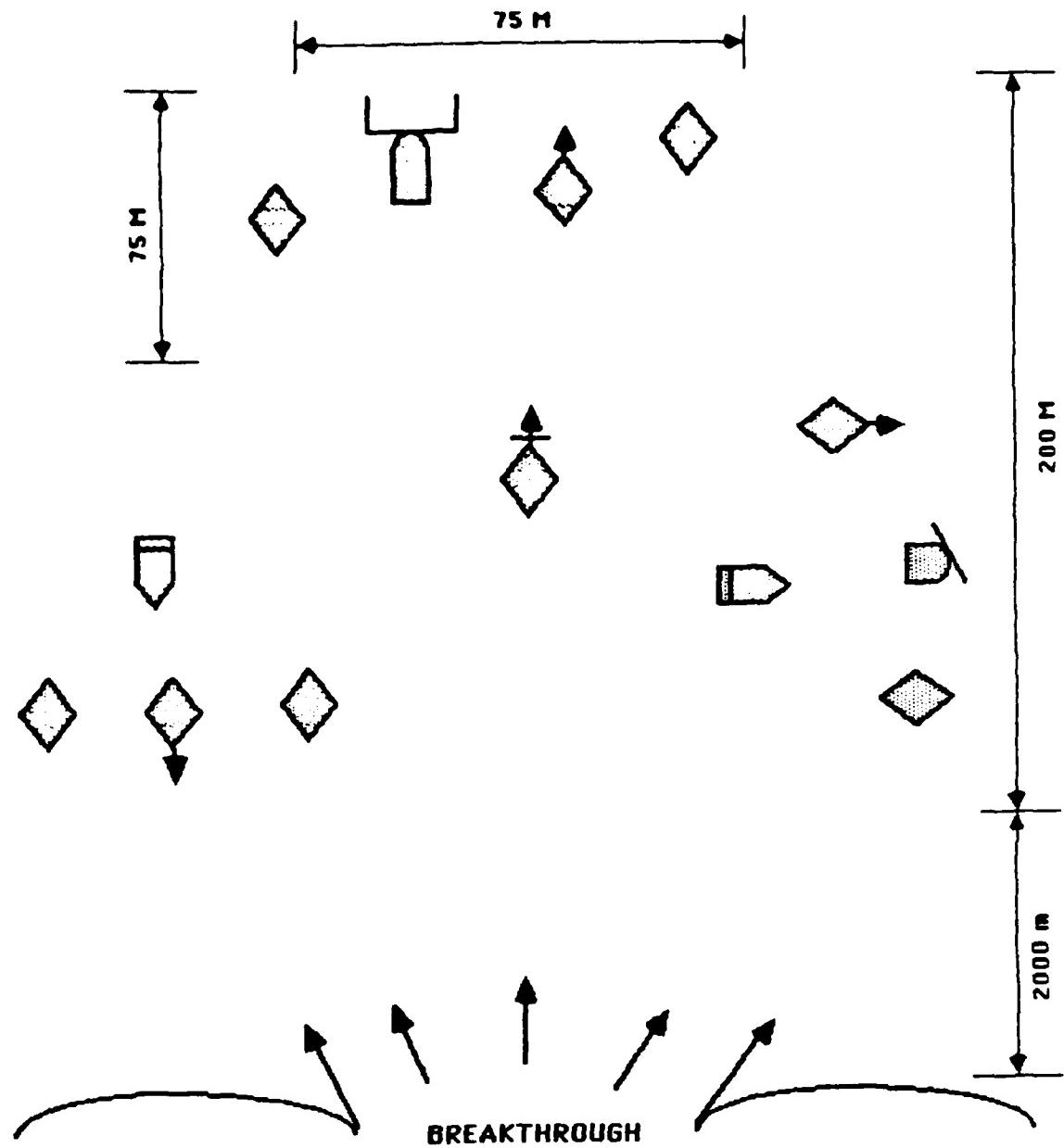


Figure A-43. Threat breakthrough vs. Blue defense (6.6.) (Motorized tank company (reinforced) attacking as 2nd echelon of 1st echelon MRR as part of main attack and breakthrough.

Appendix B

Scenario Enhancement Briefs

The seven Scenario Enhancement Briefs presented here are designed to be selectively combined the Initial/Subsequent Scenario Briefs presented in Appendix A. The battlefield systems presented are what would normally be available to support selected elements of a Soviet Motorized Rifle Regiment (BMP) portrayed in a European Theater.

Threat Scenario Enhancement A: Tactical Air Combat Air Support

Threat Composition: 2 Su-25/FROGFOOT A, Ground Attack Fighters, each armed with one 30mm cannon, 40mm rocket pods, bombs, and air-to-surface missiles

Threat Disposition: The two Su-25/FROGFOOTs stay on station for 12 minutes and make two passes to deliver ordnance.

Threat Employment: Threat aircraft operates across all the range lines. They will likely appear to support an ATTACK, or MEETING ENGAGEMENT following contact. They are also found on station covering a WITHDRAWAL.

Threat Scenario Enhancement B: Attack Helicopter

Threat Composition: 4 Mi-HIND-D Attack Helicopters, each armed with one 23mm cannon, 4-32 shot 57mm rocket pods, and 4 AT-2 SWATTER anti-tank guided missiles

Threat Disposition: The HIND-D operate in pairs. The HINDs attack in pairs or groups of multiple pairs as a coordinated or staggered attack.

The HINDs pop-up at between 1500 and 2000 meters and support attacking forces or defend strong points. The HIND stays exposed 11 to 25 seconds in order to deliver the anti-tank guided missiles.

Threat Employment: Between 1000 meters and 2000 meters, the HIND-D is employed as a tank-killer. At 400 meters or less, the HINDs support assaulting forces.

The HIND-D is found as part of the combined arms force in all the Threat tactical missions.

Threat Scenario Enhancement C: Electronic Warfare

Threat Composition: 1 Truck, GAZ or ZIL
Intercept Receiver NHF/UHF
Radio Direction Finder HF/UHF/VHF

Threat Disposition: Threat jamming capabilities are employed across the Division front, dispersed about 2000 meters from other acquisition systems. Jamming assets are deployed about 5km from the FEBA and found with 1st echelon support troops. Jamming may be constant or intermittent and is active across all U.S. frequency bands.

Upon deployment and activation of the jamming receivers, opposing forces can expect to lose 50% of their existing HF, UHF, and VHF, communications capability.

Threat Employment: Jamming is conducted across all range bands.

Threat Scenario Enhancement D: Nuclear, Biological, Chemical

Threat Composition: 1 Tak-28/BREWER, light bomber w/VX agent bomblets
or
1 D-30 Howitzer battery w/VX projectiles

Threat Disposition: The Tak-28/BREWER, light bomber delivers VX agent bomblets across the Threat Regimental Front. The bomblets contain sufficient liquid to contaminate an area 400 meters by 400 meters along the flight axis. The agent is persistent and is lethal up to 48 hours, dependent upon the air density and wind variances.

The D-30 Howitzer battery delivers 1 volley of VX chemical contaminate at a range of 30km. The volley contaminates an area 400 meters wide by 400 meters long. The agent is active for 48 hours dependent upon wind and air density conditions.

Threat Employment: Chemical employment is conducted across all range bands. It may have been employed before either force in the scenario was in place.

Threat Scenario Enhancement E: Obstacles/Barriers/Counter-Mobility

Threat Composition:

- 1 Mine Warfare Platoon from the Engineer Company of
a Motorized Rifle Regiment
- 1 MDK ditching machine
- 1 GMZ tracked minelayer
- TM-57 Anti-tank mines
- PMN Anti-personnel mines
- Barbed wire w/engineer stakes

Threat Disposition: The Mine Warfare Platoon lays an anti-tank ditch 75 meters long, 8 foot wide, and 4 feet deep, front of a defensive strong point. The ditch is reinforced with TM-57 anti-tank mines laid at 4 meter intervals in two rows, 15 meters apart. One row of PMN anti-personnel mines is laid between one of the anti-tank rows and double strand barbed wire, reinforced with engineer stakes.

Threat Employment: Counter-mobility operations are conducted between ranges of 1000 meters, down to less than 400 meters. Most employment of mines or obstacles is conducted during defensive operations.

Most counter-mobility operations will be completed before Blue's arrival in the scenario.

Threat Scenario Enhancement F: Indirect Fire - Cannon/Mortar/Rocket

Threat Composition: 1 Battery-indirect fire system, consisting of either:

- 6 122mm howitzers
- 8 120mm mortars
- 4 120mm multiple rocket launchers

Threat Disposition: The indirect fire systems fire a 15 minute preparation fire. Coverage extends to 4 herces, or about 4000 square meters. Each 1000 meters square receives approximately 400 rounds of HE munitions. The firing continues until advancing Threat forces maneuver within 1000 meters of the Front-Line-Of-Troops.

Threat Employment: Indirect fire systems are capable of engaging targets within all range bands.

Threat Scenario Enhancement G: Smoke/Obscuration

Threat Composition: 1 Smoke Generating Platoon
 4 Smoke Generators mounted on GAZ Trucks
 or
 1 122mm Howitzer Battery

Threat Disposition: HC Smoke builds up to a heavy concentration until visibility is less than 400 meters. The area obscured is 2500 meters long by 1000 meters wide. Wind direction is toward Blue Forces with wind speed at 3 knots.

Threat Employment: Smoke employment occurs across all range bands. The obscuration of the area will have started six hours before the start of the scenario.